The Illinois Informatics Institute (I3) at the University of Illinois offers two graduate degrees: a Ph.D. in Informatics, and Masters of Science in Bioinformatics. Both are interdisciplinary programs with many participating departments. Students can earn the Master of Science in Bioinformatics with a concentration in one of the following departments: Animal Sciences, Bioengineering, Crop Sciences, Library and Information Science, Chemical and Biomolecular Engineering, Computer Science. The program is overseen by I3, but students are also members of the department of their concentration. Students can earn the Ph.D. in Informatics with specializations in Bioinformatics; Health and Medical Informatics; Spatial Informatics; Data Analytics and Information Visualization; Cognitive Science and Language Processing.

Facilities
University research centers in this area include the Center for Biophysics and Computational Biology (http://www.life.uiuc.edu/biophysics) and an NIH Resource for Macromolecular Modeling and Bioinformatics (http://www.ks.uiuc.edu). The campus also offers state-of-the-art experimental bioinformatics facilities, including those in the Keck Center for Comparative and Functional Genomics (http://www.biotech.uiuc.edu) and the Institute for Genomic Biology (http://www.igb.illinois.edu). The National Center for Supercomputing Applications (NCSA), located at the University, offers opportunities for accessing, developing, and experimenting with state-of-the-art computational facilities for bioinformatics.

Graduate Programs:

major: Bioinformatics, MS (http://catalog.illinois.edu/graduate/provost/ms_bioinfo)
major: Informatics, PhD (http://catalog.illinois.edu/graduate/provost/phd_informatics)

Courses

INFO 102  Little Bits to Big Ideas  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/INFO/102)
Broad introduction to the nature, capabilities, and limitations of computing. Topics range from the way data is represented and stored, to the way today's computers work, to the general ideas of algorithms and computational efficiency, to the future of computing. Covers "Great Ideas" across various areas of the field, including, for example, cryptography and internet security, problem solving, modeling and simulation, and artificial intelligence. Same as CS 102.

INFO 199  Undergraduate Open Seminar  credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/199)
May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor.

INFO 202  Social Aspects Info Tech  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/202)
Same as IS 202 and MACS 202. See IS 202. This course satisfies the General Education Criteria for: Social Beh Sci · Soc Sci

INFO 303  Writing Across Media  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/303)
The ability to communicate effectively in multiple types of media is a crucial part of literacy in our society. In this course, students will explore the intersections of various media: print, film, images, sound, etc. Students will consider the ways in which writing--as an object and as a practice--is shaped by multimodal interactions. Also integrates practical activities with broader theoretical issues in order to provide effective strategies for designing multimedia presentations, projects, and texts that integrate photography, video, and sound. Same as WRIT 303. This course satisfies the General Education Criteria for: Advanced Composition

INFO 310  Computing in the Humanities  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/310)
Same as IS 310. See IS 310.

INFO 325  Social Media and Global Change  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/325)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, EURO 325, LAST 325, REES 325, and SAME 325. See EPS 325.

INFO 326  New Media, Culture & Society  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/326)
Same as MACS 326. See MACS 326.

INFO 345  Digital & Gender Cultures  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/345)
Same as GWS 345, MACS 345, and SOC 345. See GWS 345.

INFO 390  Special Topics  credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/390)
Explores a variety of informatics topics. Topics and prerequisites vary by section; see current Class Schedule for details. May be repeated up to 6 hours if topics vary.

INFO 399  Individual Study  credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/399)
Individual study in a subject related to informatics not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor.

Information listed in this catalog is current as of 06/2020
INFO 403  An Introduction to Top Down Video Game Design  credit: 3 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/403](https://courses.illinois.edu/schedule/terms/INFO/403))
The emphasis of this course is on developing an understanding of top down video game design using the various design methodologies and tools introduced in class. Students will form small groups (4-6) and work on their own design within a selected genre (to be determined at the beginning of the semester). Areas of focus include high level design vision, audience evaluation, User Interface and its impact on the design, iteration of a series of design documents (high, medium and low level) and the team dynamics of communication, critique and integration. The goal of the class is to have the small teams use the concepts and the tools taught in class to create a complete design document that will be cataloged for later use. 3 undergraduate hours. 3 graduate hours.

INFO 490  Special Topics  credit: 1 to 4 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/490](https://courses.illinois.edu/schedule/terms/INFO/490))
Topics of current interest. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Consent of instructor. Other prerequisites as specified for each topic offering. See Class Schedule.

INFO 491  Ugrad Bioinformatics Seminar  credit: 0 to 2 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/491](https://courses.illinois.edu/schedule/terms/INFO/491))
Introduces the field of bioinformatics and computational biology. Same as CPSC 491. 0 to 2 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 2 undergraduate hours. Prerequisite: Consent of instructor.

INFO 500  Orientation Seminar  credit: 0 or 1 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/500](https://courses.illinois.edu/schedule/terms/INFO/500))
A broad introduction to faculty research in each Informatics Area. Consists of weekly presentations by Informatics faculty highlighting their recent research, practice, and related concepts. Approved for S/U grading only. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Graduate standing in any field.

INFO 510  Research Practicum  credit: 4 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/510](https://courses.illinois.edu/schedule/terms/INFO/510))
A one semester directed research project supervised by a member of the informatics faculty in the student’s area of specialization or closely related area. These are intended to be practical research, not just literature surveys, and must have a definite output such as a paper or demonstration project. The research should be relevant to the thesis work or preparatory work to support the thesis. Informatics students must take two semesters, usually each semester should be under a different Informatics faculty member, but with the concurrence of their advising committee both may be taken under a single faculty member. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Graduate standing in any Informatics.

INFO 555  Advanced Educational Technologies for Engagement and Interactive Learning  credit: 4 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/555](https://courses.illinois.edu/schedule/terms/INFO/555))
Same as CI 555 and EPSY 555. See EPSY 555.

INFO 590  Advanced Special Topics  credit: 1 to 4 Hours. ([https://courses.illinois.edu/schedule/terms/INFO/590](https://courses.illinois.edu/schedule/terms/INFO/590))
Subject offerings of new and developing areas of knowledge in Informatics, intended to augment existing curriculum. See Class Schedule for specific topics and prerequisites. 1 to 4 graduate hours. No professional credit. May be repeated if topics vary. Prerequisite: Graduate Student Standing.