

# ACE - AGR & CONSUMER ECONOMICS

ACE Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ACE/>)

## Courses

**ACE 100 Introduction to Applied Microeconomics credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/100/>)

[IAI Code: AG901] Provides students an introduction to microeconomics by examining such topics as: individual and household decision-making regarding how to spend income and how many hours to work; decision-making by firms about production quantities, how many workers to hire, and what price to charge to maximize profits; the well-being of consumers in competitive markets compared to oligopolies and monopolies; and the role of government when markets fail (e.g., environmental, anti-trust, labor market issues, etc.). Credit is not given toward graduation for ACE 100 if credit for ECON 102 has been earned.

This course satisfies the General Education Criteria for: Social Beh Sci - Soc Sci

**ACE 123 Introduction to ACE credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/123/>)

Introductory course for students in the Department of Agricultural and Consumer Economics to ensure success in their academic journey. Through class discussions and assignments, students will develop skills that will aid in learning, explore the academic environment at Illinois, and build community inside and outside the classroom. Credit is not given toward graduation for ACE 123 and ACES 101. Required of and limited to first-year students enrolled in the Department of Agricultural & Consumer Economics. Must register for one lecture and one discussion section.

**ACE 161 Computer Concepts & Applications credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/161/>)

[IAI Code: AG913] Instruction and practice in solving data-related problems using computers and general-purpose software packages within the context of personal finance, food, agriculture, and natural resources.

**ACE 199 Undergraduate Open Seminar credit: 1 to 5 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/199/>)

Experimental course on a special topic in agricultural and consumer economics. Topic may not be repeated except in accordance with the Code. Approved for Letter and S/U grading. May be repeated if topics vary, up to 5 hours in the same semester, to a maximum of 12 hours.

**ACE 203 Introduction to Public Policy and Law credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/203/>)

Introduces students to public policy and law through federal legislation addressing agriculture, food, natural resources and rural economic development. Also introduces students to basic legal issues regarding judicial review of statutes, statutory interpretation and the Constitutional limits on Congressional powers. In addition to lectures, students will also participate in simulated legislative drafting efforts through assigned historic roles of committee members to write legislative proposals, debate and amendments.

**ACE 210 Environmental Economics & Policy credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/210/>)

Applies economic tools to analyze environmental problems and public policy formation. We will study human behavior to understand why environmental problems occur and our choice of policy tools to address problems. We will explore and critique current environmental policies in the U.S. and globally in a rigorous and constructive manner and the role of private-sector agents in solving environmental problems. Through this course, you will build your capacity for critical thinking and problem-solving. Same as ECON 210, ENVS 210, NRES 210, and UP 210.

This course satisfies the General Education Criteria for: Social Beh Sci - Soc Sci

**ACE 220 Introduction to Sales: Principles and Strategies credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/220/>)

Prepares students for a variety of professional careers in business, marketing, and sales. Explores the human elements of business and introduces students to professional selling, marketing, sales strategies, human psychology, and communication of value while exploring tips & tricks about relationship selling from professionals working in the field. Students will be expected to participate in class discussions and complete exercises that use "real-world" examples in selling. Credit is not given toward graduation for ACE 220 if credit for ACE 199 SPS has been earned.

**ACE 221 Negotiation credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/221/>)

This course is an introduction to negotiation, with an emphasis on practical and useful knowledge that students can use throughout their financial lives, including negotiating job offers, auto purchases and sales, and residential purchases and sales. Credit is not given for ACE 221 if credit for ACE 199 NPS has been earned.

**ACE 222 Agricultural Marketing credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/222/>)

Examines factors affecting the size of the market for agricultural products and the scope of marketing activities; functions and services performed; pricing agricultural products, including the nature and causes of price fluctuations; and costs of marketing and efforts to reduce costs and improve the marketing system.

**ACE 231 Food and Agribusiness Mgt credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/231/>)

Overview of management in the food and agribusiness sector. Major topics covered include: introduction to the food and agribusiness sector; the environment of the firm; fundamentals, structural design, and change in organizations; leadership, motivation, communication; and planning and control. Coverage is at the introductory level with a focus on textbook material and current issues.

**ACE 232 Farm Management credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/232/>)

Economic principles are applied to the management of farms using budgeting system analysis, record analysis, financial management, and lease analysis. Problems related to resource appraisal and business organization are also addressed.

**ACE 240 Personal Financial Planning credit: 3 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/240/>)

Examines principles of financial planning applied to individuals and households, with attention to organizing and analyzing financial information, budgeting, acquiring financial assets, managing credit, planning for taxes, investments, risk management, retirement, and estate planning.

**ACE 241 Advanced Personal Finance credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/241/>)**

Students will obtain practical knowledge and skills applicable to their daily lives, whether at home or in a professional context. Students learn advanced risk management, make informed investment decisions, navigate credit scenarios, retirement and estate planning, and work toward achieving their financial goals. Students will learn about current research on personal finance. The course includes an action learning component, allowing students to educate their peers and the community on advanced personal finance topics. Prerequisite: ACE 240 and a Quantitative Reasoning course.

**ACE 242 Women, Money, and Power credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/242/>)**

Women, Money, and Power will explore and develop money stories, managing money, workplace challenges, career advice, entrepreneurship, and empowerment. The course will present topics in an open and candid atmosphere, challenging historical perspectives and stereotypes about women and money. Students will learn from female financial planning professionals and entrepreneurs about their journeys. Students will leave this course with an understanding of issues women face in the financial world. Credit is not given towards graduation for ACE 242 if credit for ACE 199 AL has been earned.

**ACE 243 Money and Happiness credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/243/>)**

What is the relationship between money and happiness? In this course, students will engage with scientific literature on happiness and the role money plays in living well. Students will explore the intersection of quantitative and qualitative aspects of personal finance and financial planning, examining what motivates individuals, and seeking to understand how values shape the financial decision-making processes and long-term goals. Prerequisite: ACE 240 (or other financial planning background) is recommended but not required.

**ACE 251 The World Food Economy credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/251/>)**

Examination of global food production, consumption, and trade; problems of hunger and population; the role of agricultural development, trade, and aid in relieving hunger. Prerequisite: ACE 100 or ECON 102 or consent of instructor.

This course satisfies the General Education Criteria for:  
Cultural Studies - Non-West  
Social Beh Sci - Soc Sci

**ACE 254 Economic Systems in Africa credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/254/>)**

Examines the fundamentals of economic development in Africa. It will provide students the tools and concepts to think about development in a way that is consistent with economic theory, informed by empirical research, and practically connected to policy. The course will discuss issues that the region faces related to economic growth, poverty, population, health, education, gender, agriculture, and climate change. Same as AFST 254.

This course satisfies the General Education Criteria for:  
Cultural Studies - Non-West  
Social Beh Sci - Soc Sci

**ACE 255 Economics of Food and Environmental Justice credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/255/>)**

Access to food and a healthy environment varies across rural/urban location, race, gender, and income in the U.S. Students in this course will analyze questions of "food justice" and "environmental justice" through the lens of economic theory. Students will learn important concepts in the scholarship of minority cultures, learn facts about how food security and experience of environmental quality varies among groups in the U.S., and learn how to use economic theory to understand those patterns and analyze policies to correct inequities.

This course satisfies the General Education Criteria for:  
Social Beh Sci - Soc Sci  
Cultural Studies - US Minority

**ACE 262 Applied Statistical Methods and Data Analytics I credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/262/>)**

Statistics is a key tool in the data analysis process involving data collection, description, analysis, and results interpretation. This course discusses how to collect and analyze data using descriptive statistics. Random variables, probability distributions, hypothesis testing, simple linear regression, linear systems, matrices, and the theoretical underpinnings of these concepts are introduced. Emphasis is placed on examples from the field of economics to enhance students' ability to apply appropriate models to professional and everyday problems. Credit is not given toward graduation for ACE 262 if credit for any of ECON 202, CPSC 241, STAT 100, or equivalent has been earned.

This course satisfies the General Education Criteria for:  
Quantitative Reasoning I

**ACE 264 Applied Statistical Methods & Data Analytics 2 credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/264/>)**

Offers the statistical and econometric tools to describe and understand common economic issues. The emphasis will be on the multiple regression model and its associated extensions regularly used to overcome traditional econometric issues. The course will introduce and use an advanced statistical software for hands-on exercises. No prior experience with the software is expected or required. Credit is not given toward graduation for ACE 264 if credit for ECON 203 or equivalent has been earned. Prerequisite: ACE 262 or equivalent.

**ACE 270 Consumer Economics credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/270/>)**

Introduction to the study of the consumer in the American economy; sources of consumer information and consumer protection; and examination of current consumer issues within an economic framework. Prerequisite: ACE 100 or ECON 102.

**ACE 280 Experiencing Agritourism credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/280/>)**

Same as RST 290. See RST 290.

**ACE 291 Ag Policy & Leadership credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/291/>)**

Current policy issues affecting agriculture and the legislative and rulemaking process that determines those policies will be studied. A trip to Washington, DC during spring break will give the students an opportunity to interact with legislators, federal agencies, organization leaders and representatives of the national and international agricultural policy community to better understand the policy making process and the issues moving through it. Student participation will focus on developing leadership skills and having an opportunity to meet with leaders who are actively engaged in creating and changing public policy. Additional fees may apply. See Class Schedule.

**ACE 292 Farm, Food & Environmental Policy credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/292/>)**

This course seeks to broaden students' understanding of the breadth and complexity of agriculture in the United States and the challenges and opportunities to be found in the U.S. food and agricultural system. It includes a week-long trip to an area outside of Illinois (such as California) during spring break where students will meet with farm, food and environmental leaders who are deeply involved in driving the issues shaping farm, food, and environmental policy. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore, Junior or Senior standing required AND approval of the instructor.

**ACE 293 Off-Campus Internship credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/293/>)**

Supervised, off-campus experience in a field directly pertaining to a subject matter in agricultural and consumer economics. Approved for S/U grading only. May be repeated, up to 4 hours in the same semester, to a maximum of 10 hours. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Sophomore standing, cumulative GPA of 2.5 or above at the time the internship is arranged, and consent of instructor.

**ACE 294 On-Campus Internship credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/294/>)**

Supervised, on-campus, learning experience with faculty engaged in research. Approved for S/U grading only. May be repeated up to 4 hours in a semester, to a maximum of 10 hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Sophomore standing, cumulative GPA of 2.5 or above at the time the internship is arranged, and consent of instructor.

**ACE 295 Independent Study credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/295/>)**

Individual or small group research, special problems, or other studies under the supervision of an appropriate member of the faculty. Approved for Letter and S/U grading. May be repeated up to 4 hours in the same term, but no more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward the degree. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged, and consent of instructor.

**ACE 300 Intermediate Applied Microeconomics credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/300/>)**

Why could energy policy affect the profitability of farmers? Is it better to help families in developing countries with food aid or mini cash grants? Who will bear the cost of a carbon tax? Microeconomic theory helps us answer many important questions about markets and human behavior. Students will learn rigorous intermediate microeconomic theory through applications to areas such as agriculture, development, finance, consumer behavior, and the environment. Credit is not given toward graduation for both ACE 300 and ECON 302. Prerequisite: ACE 100 or ECON 102; MATH 220, MATH 221, MATH 234, or equivalent.

**ACE 306 Food Law credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/306/>)**

Explores the legal and political dimensions of food law, policy and trade in the United States and major trading partners. Examines the development of major national and state laws that apply to production, distribution and retail sale of food. Evaluates current issues in food regulation, including: biotechnology, organics, health labeling claims, food safety and products liability litigation. Discusses food regulation in other countries within the context of international treaties such as the World Trade Organization and United Nations.

**ACE 310 Natural Resource Economics credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/310/>)**

Economic principles are used to analyze a broad range of natural resource policy and management issues. Economic concepts developed include public goods, social welfare, discounting, dynamic efficiency, and resource scarcity. Natural resources examined include biodiversity, fisheries, forests, minerals, soil, and water resources. Same as ENVS 310 and NRES 310. Prerequisite: ACE 100 or ECON 102.

**ACE 321 Principles of Public Policy credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/321/>)**

Same as ACCY 321, BADM 303, and PS 321. See PS 321.

**ACE 335 Food Marketing and Behavior credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/335/>)**

This course will explore the food choices consumers make and what this means in the food and agribusiness industries. Students will also learn how to conduct basic research related to consumer behavior, including developing a research question, designing high quality surveys/experiments, and analyzing data.

**ACE 341 Careers and Professionalism credit: 1 or 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/341/>)**

Students study contemporary issues and career opportunities associated with various concentrations in the Department of Agricultural and Consumer Economics. An in-depth dialogue with industry professionals helps develop an understanding of the skill sets needed to succeed in each of the different career paths discussed. May not be repeated for credit.

**ACE 344 FinTech in Personal Finance and Financial Planning credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/344/>)**

Provides students with a dive into Personal Finance, Financial Planning and FinTech. Students will develop a comprehensive understanding of how personal finance relies on Fintech to create comprehensive solutions for clients. This class will provide hands-on training in modern financial planning software, tools and cloud-based applications. Additionally, this course explores digital currencies and blockchain technology through the lens of personal finance and financial planning. Credit is not given towards graduation for ACE 344 if credit for ACE 398 TCH has been earned. Prerequisite: ACE 240 or FIN 232.

**ACE 345 Small Business Finance credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/345/>)**

Introduction to financial decision-making for small businesses and individuals. Examines financial statement preparation and analysis; capital structure (use of debt and equity); investment analysis and portfolio theory; time value of money; interest rates and term structure; asset markets (pricing theories); evaluation of financial risk and insurance concepts, and an introduction to credit markets and financial capital suppliers. In addition, there is a class project involving a visit to either a lender or a financial planner/advisor, and other experiences to introduce students to services and careers in financial sectors. Prerequisite: ACCY 201 or equivalent, or consent of instructor.

**ACE 346 Tax Policy and Finan Planning credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/346/>)**

Explores the federal tax system, including income, social security, Medicare, and estate taxes, and state and local tax systems. Students learn basic tax principles, public policy issues embedded in the tax systems, and how tax law influences financial plans and decisions. Helps students make wiser financial decisions through increased understanding of the tax impacts of those decisions, participate knowledgeably in public debates surrounding tax policy, and prepare for careers as financial planners. Prerequisite: Sophomore standing.

**ACE 349 Risk Management and Financial Planning Across the Life Cycle credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/349/>)**

Provides students with an in-depth view of risk management and insurance by following a case study over the course of the semester. Students will evaluate human capital, health, disability, life, property and casualty, business, retirement, and long-term care risks faced by financial planning clients. The course will feature multiple lectures and interviews with practicing financial planning professionals. Content will be delivered utilizing a life cycle approach, focusing on a hypothetical client household's risks as they evolve through early career (with and without dependents), mid-career with dependents, and near-retirement stages of life. Credit is not given towards graduation for ACE 349 if credit for ACE 398 RM has been earned. Prerequisite: ACE 240 or FIN 232.

**ACE 360 Spreadsheet Models and Applications credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/360/>)**

Spreadsheet development and modeling skills intended for economics and finance applications. Advanced uses of spreadsheet software, development of user-defined functions, use of Visual Basic and comparable external interface languages, data query designs, and advanced data analyses, summary and presentation skills are stressed. Intended to serve as a prerequisite for advanced modeling courses in specific disciplinary areas. Prerequisite: ACE 161, CS 105, or consent of instructor.

**ACE 396 Honors Research or Thesis credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/396/>)**

Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated as topic vary, up to 4 hours in the same term to a maximum of 12 hours in separate terms. Credit is not given for more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward the degree. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

**ACE 398 Experiential Learning credit: 1 to 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/398/>)**

Experiential learning on a special topic in a field of study directly pertaining to subject matter in agricultural and consumer economics. Approved for Letter and S/U grading. May be repeated up to 12 hours, if topics vary.

**ACE 403 Agricultural Law credit: 3 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/403/>)**

Relation of common-law principles and statutory law to land tenure, farm tenancy, farm labor, farm management, taxation, and other problems involving agriculture. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing.

**ACE 406 Environmental Law credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/406/>)**

Examination of environmental law issues. Topics include common-law pollution control; role of administrative agencies and courts; federal and state power; air and water pollution; regulation of toxic substances; protection of land, soil and other natural resources. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Sophomore or higher standing.

**ACE 407 Business and Industry Data Analysis credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/407/>)**

Prepares students to find, analyze and explain data available through federal and state statistical agencies (e.g., U.S. Census Bureau, U.S. Bureau of Labor Statistics, Illinois Dept. of Employment Security). These data can help students answer business and policy-related questions about the employment, wage, and demographic trends within specific geographies. Active learning and regular exercises allow students to build data literacy, master basic analytical skills, and gain proficiency using Excel, PowerPoint, and several data visualization tools. 3 undergraduate hours. 4 graduate hours. Credit is not given toward graduation for: ACE 407 and ACE 499 MW or MWG. Prerequisite: ACE 161 or equivalent.

**ACE 408 Environmental Valuation credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/408/>)**

Equips students with the knowledge and skills to evaluate the economic value of natural and ecological resources. Students will explore theories of economic valuation while analyzing relevant data. Key topics include policy management and implementation, assessing ecosystem services and their valuation, and cost-benefit analysis. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 161 or equivalent; ACE 210 or ACE 310 or equivalent.

**ACE 410 Energy Economics and Policy credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/410/>)**

Use of economics tools to understand and evaluate public policy issues surrounding energy markets and related environmental markets. Focus is on the economic drivers of energy production and use, biofuel policy, transportation and storage of energy commodities, regulation of energy markets, and policies designed to mitigate the impact of energy production and consumption on the environment. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 300 or equivalent.

**ACE 411 Environment and Development credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/411/>)**

Global poverty, global food security, and climate change are three of the most critical challenges in our world today. This course describes the relationship between economic development and environmental sustainability. Economic theory is used to study global poverty, explain environmental sustainability issues, and propose policy solutions. Equity and implementation challenges related to environment and development policies are also discussed. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 300 or ECON 302.

**ACE 417 Climate Change Economics and Policy credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/417/>)**

Provides expertise on climate change, its economics and the policies associated to it. The course starts with the physical properties of climate change with an emphasis on uncertainties, the difficulties of projecting climate trends and of devising future emissions scenarios. Then the course moves on to policy instruments for emission reduction, impacts of climate change (agriculture, development, migration, labor productivity, health), the costs and benefits of adaptation and mitigation, and international agreements. Same as ATMS 417. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 100 or equivalent or consent of the instructor.



**ACE 427 Commodity Price Analysis credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/427/>)**

A comprehensive and in-depth survey of commodity price analysis with emphasis on the fundamental factors affecting prices of agricultural products; sources of information relating to production and demand factors; government activities as they relate to prices of agricultural products; technical analysis of agricultural product prices; and market efficiency and forecasting. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 100 or ECON 102; ACE 262, or equivalent.

**ACE 428 Commodity Futures and Options credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/428/>)**

Development of futures trading; operation and governance of commodity exchanges; economic functions of futures trading; operational procedures and problems in using futures markets; public regulation of futures trading; evaluation of market performance. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 222 or FIN 300 or equivalent.

**ACE 430 Corporate Food Marketing credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/430/>)**

Performance of the food system; marketing margins; transportation, advertising, and retailing of food products; structure, conduct, and performance of food marketing firms and industries; government and public interest in the food system. Same as FSHN 425. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 100 or ECON 102.

**ACE 431 Agri-food Strategic Management credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/431/>)**

Process of strategic decision-making in food and agribusiness firms; methods for analysis of business and regulatory environment; organizational issues in strategy choice for firms and supply chains. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 231, BADM 320, or consent of instructor.

**ACE 432 Advanced Farm Management credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/432/>)**

Students develop expertise in evaluating and making decisions similar to those faced by farm operators and managers. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 232. Junior standing or consent of instructor.

**ACE 435 Global Agribusiness Management credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/435/>)**

Examination of the economic and strategic management of food, textile, and agribusiness firms within a global business environment; topics include the global business environment and its institutions, organizational strategies and policies, and business operations in global agricultural, food and textile industries. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 262 or equivalent or consent of instructor. Restricted to students with junior standing.

**ACE 436 International Business Immersion credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/436/>)**

This is an experiential learning course with an international travel component designed to equip participants with the skills required to successfully operate in a global business environment. Examples of topics covered include global supply chains and marketing channels, regulatory and trade environments, and environmental considerations. The course culminates in a two-week immersion in which students learn from business leaders, trade organizations, government officials, and producers in the host country. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 6 hours for UG credit and 8 hours for GR credit. Prerequisite: Consent of instructor.

**ACE 440 Finan Plan for Professionals credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/440/>)**

Capstone course applies financial planning principles and concepts in realistic case studies of specific planning needs, requires a comprehensive financial planning exercise, and covers professional ethics and responsibilities. 3 undergraduate hours. 4 graduate hours. Prerequisite: Concurrent enrollment in or completion of ACE 345, ACE 346, ACE 444, and ACE 449.

**ACE 441 FINRA Professional Exam Review credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/441/>)**

Designed to prepare students to sit for the Series 65 Exam, SIE Exam, and begin the journey towards sitting for the CFP® Exam. This course will help students prepare for careers in financial planning, investment management, insurance, brokerage, banking, and credit unions. ACE 441 also serves as a review of content learned in the financial planning concentration. Students are responsible for registering and paying for the certification exam separately. The exam fee ranges from \$80-\$190. 3 undergraduate hours. No graduate credit. Credit is not given towards graduation for ACE 441 if credit for ACE 398 FP has been earned. Prerequisite: ACE 240 or FIN 232; ACE 349 or FIN 230; ACE 444 or FIN 441; and ACE 449.

**ACE 444 Financial Services & Investing Planning credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/444/>)**

Advanced skills in and understanding of asset pricing, equity and debt investment, portfolio theory and diversification, asset allocation, financial risk management, and financial intermediation and regulation emphasizing applications in financial planning and agricultural finance. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 345, or FIN 221, or consent of instructor.

**ACE 445 Intermediate Financial and Estate Planning credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/445/>)**

Covers financial and estate planning philosophies, techniques, and procedures. Students will utilize case studies and problem-solving activities to construct financial plans for individuals and families in various life cycle stages and family structures. 4 undergraduate hours. 4 graduate hours. Prerequisite: ACE 240 or FIN 232; ACE 300 or ECON 302; or consent of instructor. ACE 349 or FIN 230 is recommended. Restricted to students with junior standing.

**ACE 446 Modeling App's Finan Plan credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/446/>)**

Improves ability to make effective financial plans and decisions. Involves development of decision tools that are applied to "real world" financial data sets and planning/decision-making circumstances. Topics include applied data management techniques (designing queries/storable forms), financial statement analysis, numeric optimization tools, leverage assessment, incorporating risk in decisions, capital budgeting and time value of money, term structure of interest rates, and currency exchange. 2 undergraduate hours. 2 graduate hours. Prerequisite: One of ACE 240, ACE 345, FIN 221 or FIN 232; or consent of instructor and knowledge of spreadsheet software equivalent to the coverage of ACE 360.

**ACE 449 Retirement & Benefit Planning credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/449/>)**

Employee benefit and retirement planning, including employer-sponsored or individually managed options, with particular attention to determining benefit and retirement needs and managing risks in specific planning situations. 3 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both ACE 449 and FIN 434. Prerequisite: ACE 240, ACE 345, or consent of instructor.

**ACE 451 Agriculture in Intl Dev credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/451/>)**

Economics of agricultural development and the relationships between agriculture and other sectors of the economy in developing nations; agricultural productivity and levels of living in the less developed areas of the world; and studies of agricultural development in different world regions including Africa, Asia, and Latin America. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 300, ECON 302 or consent of instructor.

**ACE 452 The Latin American Economies credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/452/>)**

Same as ECON 452. See ECON 452.

**ACE 455 International Trade in Food and Agriculture credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/455/>)**

Economic theory used to analyze trends and patterns of international trade in major agricultural commodities and to understand interaction between economic development, policy, and trade; welfare implications of policies affecting production, consumption, and trade; implications of protectionism, free trade, regional trade blocs, and multilateral trade liberalization, and the role for international trade institutions. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 300, ECON 302, or consent of instructor.

**ACE 456 Agricultural and Food Policies credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/456/>)**

Analysis of agricultural and food policies and programs and their effects on producers and consumers of agricultural products. Formulation of agricultural and food policies are examined with an emphasis on historical and current economic problems affecting agriculture and rural America. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 300, ECON 302, or consent of instructor.

**ACE 474 Economics of Consumption credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/474/>)**

Concepts, theories, and methods for analysis of the micro and macro aspects of consumption; includes standards and content of consumption and description of consumption patterns and trends in the USA and selected other countries. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 270; and either ACE 300 or ECON 302; and a course in statistics; or consent of instructor. Restricted to students with junior standing.

**ACE 476 Behavioral Economics and Financial Decision Making credit: 3 or 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/476/>)**

Uses applied economics and finance coupled with insights from psychology to better understand human behavior and decision making. Application of core behavioral economic concepts and interventions to address pressing economic and financial challenges. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 300, ECON 302 or consent of instructor; a course in statistics. Restricted to students with senior standing.

**ACE 499 Contemporary Topics in ACE credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/499/>)**

Group discussion or an experimental course on a special topic in agricultural and consumer economics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in the same semester to 4 hours, or subsequent terms to a maximum of 12 hours as topics vary.

**ACE 500 Applied Economic Theory credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/500/>)**

Provides an understanding of theory of the firm, consumer economics and various market models necessary to conduct applied professional economic research with special emphasis on applications relevant to agricultural, consumer, development, and resource economics. Multivariate calculus and optimization methods are used.

**ACE 501 Risk and Info: Theory and App credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/501/>)**

Applications of the theory of economic behavior under uncertainty and asymmetric information. Analysis of individual decision making under uncertainty includes: tests of the expected utility hypothesis; comparative statistics of changes in risk preferences and risk; and moment based models of decision making. Analysis of economic equilibrium under uncertainty and asymmetric information includes tests for complete markets and applications of noncooperative game theory. Prerequisite: Concurrent enrollment in ECON 500 and ECON 506.

**ACE 502 Demand/Supply/Firms/Households credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/502/>)**

Applications of demand and supply theories and applications of firm and household behavior. Topics include demand and supply systems, aggregation and separability, dynamics, formation and boundaries of the firm, household decision making, intrahousehold allocation, allocation of time, human capital, and hedonics. Same as ECON 553. Prerequisite: ECON 500 and ACE 501.

**ACE 503 Equilibrium and Welfare Econ credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/503/>)**

Provides a theoretical and applied treatment of economic equilibrium and the consequences of displacement of equilibrium for the welfare levels of economic agents. Displacement of equilibrium will be shown to be brought about by changes in government policy, technology, and consumer preferences. Welfare measures under partial equilibrium, general equilibrium, and multi-market models will be presented. Includes various applications of welfare economics in the analysis of policy and technological change. Prerequisite: ECON 500 and at least two semesters of college calculus.

**ACE 504 Foundational Microeconomic Theory credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/504/>)**

An advanced course in microeconomic theory, Microeconomics provides students in the theoretical fundamentals that serve as the foundation for studying microeconomics at the graduate level and conducting applied microeconomics research at a very high level. Prerequisite: MATH 220, MATH 221, MATH 231, MATH 415 and ACE Math Camp. Restricted to Graduate students.

**ACE 505 Empirical Methods in Applied Economics credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/505/>)**

Covers techniques in modern applied econometrics, with an emphasis on reduced-form causal inference. These methods form an important foundation for engagement with much of the literature in agricultural and applied economics. The course surveys research designs, with an emphasis on their identifying assumptions for causal inference. To prepare for future research, students will use software with data to apply these methods in problem sets. Prerequisite: ECON 502 or equivalent.

**ACE 510 Adv Natural Resource Economics credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/510/>)**

Economic theory is used to examine the allocation of renewable and efficiency issues that arise from natural resource policy and management issues. Same as ECON 548, ENVS 510, and NRES 510. Prerequisite: ECON 302 or equivalent.

**ACE 516 Environmental Economics credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/516/>)  
Same as ECON 549. See ECON 549.

**ACE 520 Time Series Econometrics for Price Analysis credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/520/>)

Examination of selected economic problems in marketing agricultural products and relevant theory and empirical methods for analyzing and interpreting research results. Topics include: operational efficiency in marketing firms and industries; efficient allocation over space, form, and time; price making institutions; and research in demand stimulation and selected issues in trade. Prerequisite: ACE 562 and ACE 563, and ECON 500; or equivalent.

**ACE 527 Advanced Price Analysis credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/527/>)

Study of methods used to analyze factors affecting agricultural prices; analysis of agricultural prices and price movements with respect to time, space, and form; and examination of methods of price forecasting and techniques of time series analysis. Prerequisite: ACE 562 or ECON 507 and ECON 500; or equivalent.

**ACE 528 Research in Futures Markets credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/528/>)

Research literature on commodity futures and options markets, both theoretical and empirical; topics include: supply of storage, basis models, theory of the firm and hedging under uncertainty, optimal hedging, speculative returns, market performance, pricing efficiency and option pricing. Prerequisite: ECON 500 or equivalent.

**ACE 530 Microeconometrics credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/530/>)

Applied micro-econometrics concentrating on cross section data, panel data, and treatment effects. Includes methods for estimating treatment effects in the Rubin causal model framework. Emphasis will be placed on econometric procedures relevant for agricultural and applied economists and their implementation in Stata, including Mata. Prerequisite: ECON 506 and ECON 507, or equivalent.

**ACE 531 Impact Evaluation credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/531/>)

The problem of identification. Methods for impact evaluation, including randomized field experiments, propensity score matching, differences in differences, instrumental variables, and regression discontinuity. Includes exercises using the econometric software program STATA. Prerequisite: ACE 500 or ECON 500 or equivalent.

**ACE 532 Network Econometrics & Supply Chain Analysis credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/532/>)

Provides the theory, techniques and hands-on experience necessary to understand, model and measure networks and supply-chains. The course is split into two parts. The first one deals with the econometric techniques needed for the inclusion of networks in cross-sectional and panel datasets. The second part of the course will focus on input-output techniques used to measure supply-chain linkages, economic impacts and environmental footprints. An important aspect of the course is to gain hands-on experience in applying the appropriate techniques and using state-of-the-art software (GeoDa and R). Prerequisite: ACE 562, ACE 564, ECON 535, or the equivalent; or consent of the instructor. Restricted to graduate students.

**ACE 542 Advanced Agricultural Finance credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/542/>)

Theory of financial decision making as applied to farms and firms related to agriculture. Topics include asset pricing models, financial markets, capital structure, farmland control, term structure of interest rates, risk management and credit evaluation. Prerequisite: ECON 500, calculus, and mathematical statistics, or equivalent; at least one course in finance strongly recommended; or consent of instructor.

**ACE 544 Global Agriculture and Supply Chains credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/544/>)

Provides essential knowledge of the production and distribution of agricultural commodities and food products. Topics will cover the full range of the agriculture supply chain, from pre-farm to the consumer, to provide students with a better understanding and appreciation for where and how crops and livestock are produced, and the systems used to distribute products to consumer. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to current graduate students in the iMBA, iMSM, iMSA, JPiMBA/iMSA, and MAAE degree programs, and the Agribusiness and Sustainable Food Production Economics graduate certificate. Non-degree graduate students are also eligible to enroll in the course.

**ACE 545 Risk and Decision-Making in Agriculture credit: 4 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/545/>)

The food and agriculture sector faces a unique set of risks due to the nature of production and heavy reliance on uncontrollable factors such as weather. This course discusses the risks faced by farmers and food and agribusiness firms, the tools available to manage these risks, and the resulting approaches to managerial decision-making. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to current graduate students in the iMBA, iMSM, iMSA, JPiMBA/iMSA, and MAAE degree programs, and the Agribusiness and Sustainable Food Production Economics graduate certificate. Non-degree graduate students are also eligible to enroll in the course.

**ACE 546 Agriculture as an Asset Class credit: 2 Hours.** (<https://courses.illinois.edu/schedule/terms/ACE/546/>)

Modern agriculture relies heavily on capital, assets, and financing. Students will examine scale and structure of the US agricultural sector, capital structure and financing of the asset class, rise of investment activities, and ag-specific institutions which serve the industry. Topics include financial performance, asset exposure mechanisms, and emerging investment opportunities. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to current graduate students in the iMBA, iMSM, iMSA, JPiMBA/iMSA, and MAAE degree programs, and the Agribusiness and Sustainable Food Production Economics graduate certificate. Non-degree graduate students are also eligible to enroll in the course.

**ACE 547 Modern Issues in Food & Agriculture credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/547/>)**

With a projected global population of 9.7 billion by 2050, students in this course will discuss current food, agriculture, and sustainability challenges through a point/counterpoint framework to voice opinions and ask questions. Students will gain comprehensive knowledge of contemporary, ever-changing issues across the agriculture sector, from production to consumption. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to current graduate students in the iMBA, iMSM, iMSA, JPiMBA/iMSA, and MAAE degree programs, and the Agribusiness and Sustainable Food Production Economics graduate certificate. Non-degree graduate students are also eligible to enroll in the course.

**ACE 557 Food, Poverty and Development credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/557/>)**

Economic theory and empirical analyses are used to study economic development, emphasizing the structural transformation of an economy, poverty alleviation among households, improvement in food security and public policies to support those processes. Topics include poverty measurement, poverty dynamics, growth theory, and impact evaluation. Special attention is paid to the role of the agricultural sector and rural development. Prerequisite: ACE 500 or ACE 501 or ECON 500 and basic econometrics.

**ACE 559 Food, Trade and Development credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/559/>)**

Economic theory and empirical analyses are used to study international trade, emphasizing food trade, agricultural policy and international development. Topics include theoretical models of international trade, regional agreements, and food trade. Special attention is given to the impact of trade in developing countries with large agricultural sectors and to issues relating to trade in food products. Prerequisites: ACE 500 or ACE 501 or ECON 500 and basic econometrics.

**ACE 561 Adv Res and Scholarly Comm credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/561/>)**

Seminar intended for Ph.D. students who have completed written preliminary examinations. Develops a comprehensive understanding of the research process. Discussions include identification of research topics, structure of research proposals, review of literature, effective communication, management of research activities, and contributions to scholarly debate. Prerequisite: Consent of instructor.

**ACE 562 Applied Regression Models I credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/562/>)**

Application of simple regression methods to problems in agricultural and consumer economics with emphasis on foundational probability, random variable, and distribution concepts, development of the simple, two-variable regression model; estimation of model parameters; hypothesis testing; and prediction. Prerequisite: ACE 262 or equivalent; one of MATH 220, MATH 221, MATH 234.

**ACE 563 Math Program App Econ I credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/563/>)**

Application of mathematical programming methods to discrete models in agricultural economics; Kuhn-Tucker theorem, Lagrange multipliers, duality, simplex method as applied to linear and quadratic programming, and input-output analysis models in agriculture. Prerequisite: MATH 124; one of MATH 220, MATH 221, MATH 234.

**ACE 564 Applied Regression Models II credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/564/>)**

Application of multiple regression methods to problems in agricultural and consumer economics with emphasis on extensions to the simple, two-variable regression model, development of the multiple regression model; and problems created by violations of basic model assumptions. Prerequisite: ACE 562 or equivalent.

**ACE 569 Career Development for PhDs credit: 1 Hour. (<https://courses.illinois.edu/schedule/terms/ACE/569/>)**

This course is intended to help doctoral candidates transition into careers in or out of academia. The class covers job market processes and strategies, presentation skills, teaching philosophies, and development of research trajectories. Approved for S/U grading only. Prerequisite: ACE 561.

**ACE 571 Household Economics credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/571/>)**

Discussion of current topics and review of the literature in household economics. Relevant topics include marriage, divorce, intergenerational transfers, investment in children, migration. Prerequisite: ECON 500 or equivalent.

**ACE 580 Taxation and Regulation of Alternative Investments credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/580/>)**

Students will gain a thorough understanding of alternative investments, encompassing regulations, taxation, specific investments, compliance, and reporting obligations. Students will explore these investments in financial markets and gain insights into related regulations. Other course topics include taxation, planning, compliance, reporting, due diligence, anti-money laundering rules, and investor protection in alternative investments. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to Agricultural & Applied Economics, MAAE, and the Land, Agriculture, and Alternative Investing graduate certificate programs. Non-degree graduate students are also eligible to enroll in the course.

**ACE 581 Financial Lifecycles and Alternative Investments credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/581/>)**

Students will examine financial planning throughout the consumer lifecycle with a focus on alternative investments. Topics include wealth management, retirement plans, wealth accumulation phases, and generational wealth transfer. Through hands-on activities and engaging discussions, learners will gain knowledge of asset allocation, tax considerations, and wealth management strategies for incorporating alternative investments. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to Agricultural & Applied Economics, MAAE, and the Land, Agriculture, and Alternative Investing graduate certificate programs. Non-degree graduate students are also eligible to enroll in the course.



**ACE 582 Theory and Portfolio Dynamics of Alternative Investments**  
**credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/582/>)**

Finance professionals and investors will examine alternative investment strategies, discuss modern portfolio theory's history and impact, and explore analysis concepts and asset classes. Students will construct portfolios using optimization techniques, discuss tax-efficient strategies, and evaluate alternative investments in institutional and consumer portfolios to develop due diligence frameworks for informed investment decisions. This course is exclusively offered online. It has been designed for and is restricted to students pursuing a graduate certificate and specific degree programs. Prerequisite: Restricted to Agricultural & Applied Economics, MAAE, and the Land, Agriculture, and Alternative Investing graduate certificate programs. Non-degree graduate students are also eligible to enroll in the course.

**ACE 591 Independent Study credit: 0 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/591/>)**

Individual research work under the supervision of an appropriate member of the faculty. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours if topics vary.

**ACE 592 Special Topics credit: 0 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/592/>)**

Group instruction on a special topic under the direction of one or more members of the faculty. Approved for both letter and S/U grading. May be repeated in a semester to a maximum of 8 hours. May be repeated to a maximum of 24 total hours, if topics vary.

**ACE 594 Seminars and Workshops credit: 0 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/594/>)**

Participation in a seminar or workshop with other graduate students and faculty members. Approved for both letter and S/U grading. May be repeated.

**ACE 599 Thesis Research credit: 0 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/ACE/599/>)**

Individual research under supervision of members of the graduate teaching faculty in their respective fields. Approved for S/U grading only. May be repeated in the same term or separate terms.