ECON - ECONOMICS

ECON Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ECON/)

Courses

ECON 102 Microeconomic Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/102/)
[IAI Code: S3902] Introduction to the functions of individual decision-makers, both consumers and producers, within the larger economic system. Primary emphasis on the nature and functions of product markets, the theory of the firm under varying conditions of competition and monopoly, and the role of government in prompting efficiency in the economy. Credit is not given toward graduation for: ECON 102 and ACE 100.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 103 Macroeconomic Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/103/)
[IAI Code: S3901] Introduction to the theory of determination of total or aggregate income, employment, output, price levels, and the role of money in the economy. Primary emphasis on monetary and fiscal policy, inflation, unemployment, economic growth, and international economics.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 198 Economics at Illinois credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECON/198/)
An introductory course intended to help students explore the various fields of economics. Presents brief introductions to various faculty members within the Department of Economics at Illinois and an overview of their respective fields. Enrollment limited to undergraduate Economics majors only. Approved for S/U grading only.

ECON 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ECON/199/)
Approved for both letter and S/U grading. May be repeated.

ECON 202 Economic Statistics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/202/)
Introduction of basic concepts in statistics including the presentation of data, descriptive statistics, probability theory, discrete and continuous distributions, sampling distributions, estimation, and hypothesis testing. The approach of the class includes both learning the concepts behind basic statistics and also how to apply these concepts in "real-life" situations. Utilizes a practical project format. To complete the Business Statistics sequence, students must also complete ECON 203. Credit is not given for ECON 202 if credit for a college-level introductory statistics course such as PSYC 235, SOC 280, or STAT 100 has been earned. Prerequisite: Credit or registration in one of MATH 220, MATH 221, MATH 234.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

ECON 203 Economic Statistics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/203/)
Continuation of ECON 202. Builds upon point and interval estimation as well as hypothesis testing skills first introduced in ECON 202. Utilizes a practical project format to extend the student skill set to include simple and multiple linear regression and time series techniques. Students will: Understand the relevance of statistics in their future course-work and professions; Be trained to identify the proper statistical technique to apply to a problem; Be adept at finding the answers to statistical queries using excel; Be able to properly interpret the results of their analysis. Students must have completed a course on probability and statistical analysis before taking ECON 203. The best course to meet this requirement is ECON 202 at the University of Illinois. Prerequisite: ECON 202; one of MATH 220, MATH 221, or MATH 234.

ECON 210 Environmental Economics & Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/210/)
Same as ACE 210, ENVS 210, NRES 210, and UP 210. See ACE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 298 Professional Economics Internship credit: 0 or 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/298/)
Supervised, on or off-campus experience in a field directly pertaining to Economics, Econometrics & Quantitative Economics, or CS+ Economics. Students will complete course requirements along with a written report and possible presentation pertaining to their internship accomplishments at the end of the internship. Approved for S/U grading only. May be repeated in separate terms to a maximum of 6 credit hours. Prerequisite: Student must have secured a professional work experience related to economics which accompanies and enhances their academics. Restricted to Economics, Econometrics, or CS+Economics majors.

ECON 300 Everyday Economics for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/300/)
What does it mean to think like an economist? How can we use economic thinking to make the world a better place? This course provides a unique opportunity to go beyond introductory economics concepts without requiring prior economic study. Students will learn how to apply economic tools to evaluate policy proposals, solve complex problems, and predict the effect of real-life decisions. Does not count towards Economics major or minor requirements. Prerequisite: Not intended for Economics majors or minors.

ECON 302 Inter Microeconomic Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/302/)
Microeconomic analysis including value and distribution theory; analysis of the pricing of the factors of production integrated in a micro-general equilibrium context which builds towards explaining the resource allocation process. Prerequisite: ECON 102 or equivalent. MATH 220, MATH 221, MATH 234 or equivalent.

ECON 303 Inter Macroeconomic Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/303/)
The modern theory of the determination of the level and rate of growth of income, employment, output, and the price level; discusses alternate fiscal and monetary policies to facilitate full employment and economic growth. Prerequisite: ECON 102; ECON 103; and one of MATH 220, MATH 221, MATH 234.

ECON 397 Senior Research I credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/397/)
Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year, or consent of instructor; senior standing.

ECON 398 Senior Research II credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/398/)
Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year; senior standing.

ECON 399 Advanced Undergraduate Open Seminar credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ECON/399/)
Independent study course covering topics not treated by regular course offerings. This class does not satisfy departmental graduation requirements. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Junior or senior standing; ECON 302; ECON 202.

ECON 402 American Economic History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/402/)
Survey of the history of the American economy from the colonial era to the present. Studies the features and development of the American economy and examines the watershed events that have transformed it over its history. 3 undergraduate hours. No graduate credit. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course are required.

ECON 411 Public Sector Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/411/)
Economic analysis of government tax and expenditure policies; topics include public good and externality theory, public choice theory, income distribution, cost-benefit analysis, principles of taxation, tax incidence, economic effects and optimal structures of major taxes, and taxation in developing economies. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ECON 414 Urban Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/414/)
Analyzes the urban economy. Topics include: economic reasons for the existence of cities; the theory of urban spatial structure; the effects of taxation on housing decisions; the economics of freeway congestion; economics analysis of local public goods and services; economic analysis of rent control, slum policies and land-use controls. Same as FIN 414. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302.

ECON 415 Environmental Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/415/)
Application of economic theory to topical issues such as pollution, climate change, and the environmental impacts of overpopulation. Both market-based and regulatory solutions to these problems are discussed. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 418 Health Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/418/)
Introduction to the economics of the U.S. health care system. Analyzes the supply of and demand for health care, building upon models of consumer, producer, and insurer behavior. Covers public policy, including regulation and provision of services to the poor and elderly. Emphasizes empirical evidence on these topics. 3 undergraduate hours. 4 graduate hours. Credit is not given for ECON 482 and ECON 418. Prerequisite: ECON 202; ECON 302; MATH 220 or MATH 221 or other calculus course are required.

ECON 420 International Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/420/)
Introduction to the theory of international trade and finance with selected application to current problems of trade policy, balance of payments adjustment, the international monetary system, and globalization issues. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent, or consent of instructor; ECON 303 is recommended.

ECON 422 International Macroeconomics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/422/)
International macroeconomics and financial crises. Topics include balance of payments, exchange rates, business cycle risk, currency unions, and safe assets. Emphasis on understanding different types of financial crises from a positive and normative perspective. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202 or introductory statistics equivalent, ECON 303, MATH 220/MATH 221 or Calculus I equivalent.

ECON 425 Macroeconomic Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/425/)
Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, fiscal, incomes, and exchange rate policies, and their effectiveness for treating inflation, unemployment, productivity, resource and exchange rate problems. May emphasize current issues in developed economies or in emerging market economies. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; ECON 303; MATH 220 or MATH 221 are required. MATH 231 is recommended. Prior exposure to financial markets is encouraged.

ECON 426 Monetary Economics and Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/426/)
Study of a variety of topics on money, banking, and financial markets. In particular, provides an introduction to money and its role in the economy, the bond market and interest rates, the stock market and other financial assests, exchange rates, banks and regulation of the banking industry, the money supply process and monetary policy. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 303; MATH 231 are required. ECON 302 is recommended; Prior exposure to financial markets is also encouraged.

ECON 436 Economics of Coordination credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/436/)
Builds on theories and applications of intermediate microeconomics. Topics covered include: the importance of models, the basic principles and concepts of economics, game theory and evolutionary game theory, the role of markets and government and the role of other institutions in general, the role of information, competition, the problems of collective action, and coordination problems. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302; MATH 220/ MATH 221 or Calculus I equivalent.

ECON 437 Game Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/437/)
Explores game theory and strategic decision making. Game theory is the study of strategic interaction where one person's actions affect the actions of others. Introduces students to the tools for modeling and solving problems with strategic interaction. Will cover topics such as Nash equilibrium, dominance, voting, bargaining, auction, adverse selection, each of which have broad applications in economics, politics, psychology, and everyday life. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 are required. ECON 203; MATH 231 are recommended.

ECON 440 Economics of Labor Markets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/440/)
Studies the microeconomic determinants of labor demand and supply, economic effects of unions, and macroeconomic labor market problems. Same as LER 440. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

ECON 442 Women in the Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/442/)
Applies economic models of the labor market and household organization to a wide range of important topics, including marriage, fertility, discrimination, and family policies to better understand both personal life choices and public policy problems. 3 undergraduate hours. No graduate credit. Prerequisite: ECON 203; ECON 302; MATH 220 or MATH 221 or other Calculus I equivalent; completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

ECON 447 Economics of the Workplace credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/447/)
Application of economic theory to the relationship between workers and firms in the workplace. We will apply important economic concepts and models to issues including recruitment, personnel selection, employee training, managing turnover, job design, performance evaluation, and incentive compensation. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 448 Employee Compensation and Incentives credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/448/)
Employee compensation is a critical tool for organizations to attract, retain, and motivate its employees. Students will be introduced to major principles in compensation design and will examine the incentives embedded in various compensation systems. The topics include forms of pay, incentive theory, pay structure, pay-for-performance, and employee benefits. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 450 Development Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/450/)
Analyzes the economic problems associated with newly developing nations; emphasizes their economic structures, their factor scarcities, and their programs for development. Not open for graduate credit to graduate candidates in economics. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202, ECON 302, and one of: MATH 220, MATH 221, OR MATH 234.

ECON 451 Program Evaluation in Developing Economies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/451/)
Advanced economics course on microeconomic issues in developing countries with particular attention to empirical analyses and methodologies to address fundamental theoretical and policy relevant questions. Focus is on topics within health and education, although papers may cover other topics. An original empirical research paper is required, applying ideas and concepts covered in class. Class alternates between lectures (discussing new ideas or concepts and assigned readings) and lab (applying concepts to actual data using Stata). 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203 and ECON 302 or equivalents; for undergraduate students only: Completion of campus Composition I general education requirement. Junior Standing Required. Priority registration provided to Economics Majors.

ECON 452 The Latin American Economies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/452/)
Focuses on the economic history of the region, the recent industrialization process and its impact, the role of the state and foreign capital, the impact of the recent privatization processes, inflation and stabilization policies, and issues surrounding the distribution of income. Same as ACE 452. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 453 Economies of the Middle East and North Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/453/)
Study of the business and economic conditions in the Middle East and North Africa (MENA). Students are expected to expand their knowledge of microeconomic, macroeconomics, and economic development theories and to apply them to concrete cases in the MENA region. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 455 Economics of Poverty Alleviation in Developing Countries credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/455/)
This course examines which policies are effective for alleviating poverty, which are not, and why. The course will have a strong methodological and analytical component, focus on why interventions and policies work, and how to establish evidence on the effectiveness of specific interventions and policies. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course are required.

ECON 456 Economic Development and Migration credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/456/)
Topics include the inter-relationships between economic development and migration. After introducing the basic concepts of poverty and inequality - between as well as within countries - this course focuses on the role that migration and population growth play in the process of economic development. The causes of migration and its consequences are examined at national and international levels together with their policy implications, including those related to urbanization, brain drain, and labor market impacts of immigration. A range of migration forms is discussed, including international and internal migration, permanent and temporary migration, legal and illegal migration, as well as forced migration and refugees. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 460 Financial Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/460/)
Study of a variety of financial economics topics. Introduces basic financial products (stocks, bonds, futures, options, and other derivatives), asset pricing theory including capital asset pricing model (CAPM), arbitrage pricing theory (APT), financial institutions and the organization of financial markets, and some topics on financial crisis and monetary policy. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 469 Economics of Risk credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/469/)
Exploration of economic decisions under uncertainty. Includes expected utility theory and non-expected utility theory; applications to individual decision problems in investment and insurance; general equilibrium in markets under uncertainty, including problems generated by asymmetric information; measurement of risk; the value of information obtained before a decision. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302 or equivalent; one of MATH 220 or MATH 221 or equivalent.

ECON 472 Financial Econometrics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/472/)
Examines the econometric modeling applied to empirical and computational finance. Explains the empirical properties of financial data as well as the statistical models behind these stylized facts from the data. Explains the statistics and time series concepts that will be useful to understand financial market dynamics, and investigates some popular econometric models and estimation methods. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231; ECON 471 are recommended.

ECON 474 Econometrics of Policy Evaluation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/474/)
Develops the basic tools to understand and use modern econometric methods for estimating and making inference of causal effects. The topics include randomized experiments, natural experiments, matching methods, instrumental variables, and regression discontinuity. Focuses on topics which are relevant for policy problems. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231; ECON 471 are recommended.

ECON 475 Economic Forecasting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/475/)
Overview of modern, quantitative, statistical and econometric methods for forecasting and evaluating forecasts. Topics include linear regressions; modeling and forecasting trends and seasonality; characterizing and forecasting cycles; MA, AR, and ARMA models; forecasting with regressions; evaluating and combining forecasts. Advanced topics include unit roots, stochastic trends, ARIMA models, and smoothing will be covered as time permits. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231 is recommended.

ECON 480 Industrial Comp and Monopoly credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/480/)
Analyzes the ways firms and markets are organized, how they interact, outcomes of various types of firm behavior and performance of markets, and causes and types of market failure. Particular emphasis on the contribution of game theory as the equilibrium concept in oligopoly settings. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302.

ECON 481 Govt Reg of Economic Activity credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/481/)
Analysis of economic bases, policies, and consequences of government regulation of economic activity. Reasons for government intervention in market behavior, methods of government intervention, and outcomes are studied. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ECON 482 Economics of the Digital Economy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/482/)
Analysis of firm strategies and public policy issues surrounding the digital economy and related industries. Applies economic tools and principles, including game theory, industrial organization, and information economics. Topics include: differentiation of prices and products; search cost and price dispersion; network effects and system competition; economics of platforms; intellectual property; antitrust regulations. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302; MATH 220/MATH 221 or Calculus I equivalent.

ECON 483 Econ of Innovation and Tech credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/483/)
Examines the economic factors shaping innovation and technical change since the industrial revolution with emphasis on the economic relationship between science and technology and the role of government in technical change. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 102 or equivalent; ECON 302 or consent of instructor.

ECON 484 Law and Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/484/)
Applications of economic theory to problems and issues in both civil and criminal law and the effect of legal rules on the allocation of resources; includes property rights, liability and negligence assignment, the use of administrative and common law to mitigate market failure, and the logic of private versus public law enforcement. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

ECON 490 Topics in Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/490/)
Special topics in advanced economics within a variety of areas. See course schedule for topics. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate terms to a maximum of 9 undergraduate hours or 8 graduate hours if topics vary. Prerequisite: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course. Some topics may require additional prerequisites, read the section text for each topic.

ECON 491 Topics in Econometrics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/491/)
Special topics applying advanced econometrics concepts. Students will use quantitative analysis and economic theories to answer economic questions and uncover relationships between variables across a variety of topics; instruction in statistical and computing techniques as needed. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary, repeatability for undergraduate students unlimited; for graduate students to a maximum of 8 credit hours. Prerequisite: ECON 203; ECON 302; and MATH 220/MATH 221 or Calculus I equivalent. See Class Schedule for other prerequisites as indicated depending on topic and content.

ECON 500 Microeconomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/500/)
Emphasizes microeconomic theory; principal topics include a review of value and distribution theory, the theory of choice by households and firms, general microeconomic theory, and theoretical developments of current interest. Credit is not given for both ECON 500 and ECON 528. Graduate credit for both ECON 302 and ECON 500 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 or equivalent.

ECON 501 Macroeconomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/501/)
Emphasis on macroeconomic theory; principal topics include a review of Keynesian macroeconomic theory, formal growth theory, and selected business cycle theory. Credit is not given for both ECON 501 and ECON 529. Graduate credit for both ECON 303 and ECON 501 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 and ECON 103 or equivalent.

ECON 502 Economic Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/502/)
Classical statistics and regression analysis; descriptive statistics, probability and point and interval estimation; decision theory; variance analysis; and linear regression and least-squares estimates. Prerequisite: A course in statistics or consent of instructor.

ECON 503 Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/503/)
Develops a general methodological basis for searching for quantitative economic knowledge; integrates and gives operational content to the topics of economic, statistical, and econometric theory. Prerequisite: ECON 502, or equivalent.

ECON 504 Time Series Analysis in Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/504/)
Modern time series analysis techniques for handling economic data which arises in a happenstance fashion through time and their application to specific economic problems. Prerequisite: ECON 503 or STAT 578, or equivalent. MSPE Graduate Student Standing.

ECON 505 Introduction to Game Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/505/)
Applications of game theory. Introduction to basic static games and dynamic games with particular attention to applying these games to real world situations. Prerequisite: MATH 415; ECON 500 and ECON 501, or equivalent. MSPE Graduate Student Standing.

ECON 506 Programming for Economic Data Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/506/)
Equips master's students with essential programming skills for analyzing economic data. Focus is on practical applications of programming in R and Python to handle, visualize, and analyze large datasets used in economics. Students will obtain the tools necessary to engage in data-driven research and be able to leverage programming languages to tackle complex economic problems. Prerequisite: ECON 202, ECON 203, and ECON 471; or equivalent. Restricted to MS: Economic Modeling, AI, and Data Science students.

ECON 507 Data Analytics for Applied Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/507/)
Introduction to data analytics tools and techniques specifically tailored for applied economics. Students will learn how to analyze real-world economic data using modern statistical and machine-learning methods. Focus is on practical applications in economic policy analysis, market research, and decision-making, leveraging tools like Python, R, and specialized economic databases. Prerequisite: ECON 506. Restricted to MS: Economics Modeling, AI, and Data Science students.

ECON 508 Econometrics for Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/508/)
Builds a strong foundation in probability theory, statistical inference, regression analysis, and econometric methods for analyzing economic data. Reinforces theoretical concepts through assignments and an empirical research project using R so that students learn how to apply econometric techniques to analyze real-world data, derive meaningful insights, and present results professionally. Prerequisite: ECON 202, ECON 203, and ECON 471; or equivalent. Restricted to students in the MS in Economic Modeling, AI, and Data Science and MS in Economics and Computer Science programs. Exceptionally well-prepared students in the MS in Policy Economics program may enroll, but only with approval from the program directors.

ECON 509 Capstone Project in Economics and Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/509/)
Application of knowledge and skills to real-world, data-driven economic analysis. Students will work on an individual or group research project, utilizing econometric, statistical, and machine learning methods to solve complex economic problems. Emphasis on problem formulation, data collection, analysis, interpretation, and professional presentation of findings. Prerequisite: Restricted to MS Economic Modeling, AI, and Data Science majors.

ECON 510 Economics of Taxation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/510/)
Theoretical and empirical analysis of the impact of taxation on the economic system; topics include tax equity and excess burden, incentive effects of taxation, tax incidence, structure of major types of taxes (income, consumption, and wealth), normative tax analysis, and taxation in developing economies. Prerequisite: ECON 302 or equivalent. MSPE Graduate Student Standing.

ECON 511 Public Goods & Market Failures credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/511/)
Comprehensive analysis of the government's role in the economy, focusing on market failures, policy responses, and political and informational constraints. Students will examine budgets across government levels and assess public provision of services like defense, education, health care, and social insurance. Prerequisite: ECON 500 (Microeconomics) or consent of instructor.

ECON 512 Labor Economics: Theory and Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/512/)
Overview of the fundamental principles of labor economics, starting with key theories and economic intuitions that form its foundation, before exploring real-world applications and assessing labor market policies. Prerequisite: ECON 500, ECON 501 and ECON 502 or consent of instructor. Restricted to students in MS, Economics, Policy Economics program.

ECON 513 International Trade credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/513/)
The pure theory of international trade, general equilibrium income and welfare, tariffs, the theory of policy ranking, strategic trade policy, customs unions, international trade law and the WTO. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

ECON 514 International Financial credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/514/)
Examines the balance of payments, exchange rate, capital flows and international monetary system; fiscal and monetary policy in open economies. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

ECON 516 Monetary Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/516/)
Micro- and macroeconomic theories of the supply of and demand for money; money substitutes and their significance; review of current empirical research; money in closed economy, macroeconomic, and static general equilibrium models; and analysis of inflation and unemployment. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

ECON 517 Monetary Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/517/)
Theories of money; money in dynamic models; money in open economy macroeconomic models; stabilization policy; and international aspects of monetary theory. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

ECON 519 Development and Growth Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/519/)
Review and analysis of the theories and patterns of growth in developed and underdeveloped economies; the process and impact of import substitution industrialization; trade and economic development; the role of the state and privatization in the development process; agricultural stagnation and modernization. Prerequisite: ECON 500 and ECON 501 or consent of instructor. MSPE Graduate Student Standing.

ECON 520 Economic Development: Theory and Evidence credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/520/)
Broad examination of economic development, integrating both micro and macro perspectives. Explores factors that drive economic growth and influence development outcomes across countries. Students will analyze key challenges, evaluate development policies, and consider the role of empirical methods in assessing economic progress. By the end of the course, students will have a deeper understanding of the patterns of development and the policy approaches aimed at fostering economic growth and reducing global disparities. Prerequisite: ECON 500, ECON 501, ECON 502 and ECON 503, or consent of instructor.

ECON 521 Financial Economic Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/521/)
Introduction to financial economics and empirical finance, with the main focus being the study of core concepts in finance, comprehension of various finance models, and their application to real financial data. Begins with review essential background concepts, followed by an exploration of popular finance models. Students will engage in both analytical problem sets and data exercises as a way of reinforcing and understanding key lecture concepts. Prerequisite: FIN 500, ECON 502, and ECON 503 or consent of instructor. Restricted to students in the Policy Economics, MS program.

ECON 522 Applied Machine Learning in Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/522/)
Overview of different concepts, techniques, and algorithms in machine learning with a view towards applications in economics. Topics covered include regression, classification, model selection, predictive accuracy such as regularized regression, decision trees, boosting, support vector machines, and neural networks. Students acquire the skills to apply basic machine learning methods to solve economics problems. Prerequisite: ECON 500 and either ECON 502 or ECON 508.

ECON 523 Causal Inference and Policy Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/523/)
Provides a solid foundation in modern econometric methods for causal analysis, with a focus on their applications to policy-relevant questions. Covers a wide range of approaches for identifying causal relationships, including randomized controlled trials, observational studies, matching methods, difference-in-differences, synthetic control, regression discontinuity designs, instrumental variables, and local average treatment effects. Both theoretical underpinnings and practical application of each method are examined. By the semester's end students will be critically equipped to assess, design, and evaluate causal inference strategies in applied economic research. Prerequisite: ECON 508 or both ECON 502 and ECON 503.

ECON 524 AI and Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/524/)
Introduction to AI-assisted data analysis, with the focus being the study of core concepts in AI, machine learning and econometrics, and their application to structured and unstructured data with economic applications. Essential background concepts will be followed by an exploration of popular AI and ML models and how they are used in economics. Students will engage in both analytical problem sets and data exercises. Prerequisite: CS 225, CS 374, MATH 241, MATH 257, ECON 203, ECON 302 or their equivalents. Restricted to MS in Economics and Computer Science students, or with permissions of the instructor.

ECON 525 Economics of AI and the Firm credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/525/)
Analysis of economics and management of artificial intelligence in organizations, with a focus on how firms can effectively adopt and implement AI technologies. Uses economic theory and empirics to understand how AI technologies influence productivity, pricing, organizational structure, labor markets, and competition. Applications are drawn from healthcare, retail, and finance sectors. Attention is given to empirical findings, theoretical models, and policy considerations related to automation, prediction, and algorithmic decision-making. Prerequisite: CS 225, CS 374, MATH 241, MATH 257, ECON 203, ECON 302 or their equivalents. Restricted to MS in Economics and Computer Science students, or with permissions of the instructor.

ECON 526 Economics of Human Computer Interaction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/526/)
The intersection of technology and society is examined, focusing on how human-computer interactions shape socioeconomic outcomes. Digital platforms, algorithms, and interfaces are analyzed for their impact on decision-making, labor markets, privacy, cultural consumption, and social equity. Frameworks are developed to evaluate technological changes, market dynamics, and policy responses. Students assess the societal implications of technical design and explore strategies for more equitable, sustainable digital futures. Prerequisite: CS 225, CS 374, MATH 241, MATH 257, ECON 203, ECON 302 or their equivalents. Restricted to MS in Economics and Computer Science students, or with permissions of the instructor.

ECON 530 Microeconomic Theory I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/530/)
Emphasizes microeconomic theory particularly theory of the consumer, theory of the firm, general equilibrium analysis and welfare analysis. Also, covers uncertainty in general equilibrium and informational economics. Prerequisite: ECON 302 and ECON 303 or equivalent.

ECON 531 Macroeconomic Theory I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/531/)
Introduces students to a variety of dynamic general equilibrium models that currently dominate the study of growth and economic fluctuations. These models include: neoclassical growth models, overlapping generations models, CAPM models, search models, and endogenous growth models. In covering these models, the course also seeks to develop a set of techniques for students to use. These techniques include discrete time optimization, continuous time optimization, dynamic programming and model calibration. Prerequisite: ECON 302 and ECON 303, or equivalent; calculus.

ECON 532 Econometric Analysis I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/532/)
Theoretical treatment of economic statistics. Covers probability theory, set theory, asymptotic theory, estimation and hypothesis testing. Prerequisite: A course in statistics or consent of instructor.

ECON 533 Microeconomic Theory II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/533/)
Focusses on information and incentives in economic problems. Topics include non-cooperative games, dynamic games, mechanism design, auctions, matching and networks. Prerequisite: ECON 530, or equivalent; calculus.

ECON 534 Macroeconomic Theory II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/534/)
Development of modern macroeconomic theory, including disequilibrium theory, optimal short-term stabilization measures, and monetary, fiscal, incomes, and exchange rate policies; large-scale econometric models; linear and neoclassical growth models; aggregate distribution theory; money, capital movements, trade, and growth; optimal growth models; and exhaustible resources and growth. Prerequisite: ECON 531.

ECON 535 Econometric Analysis II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/535/)
Part 1: The construction of econometric models; characteristics of models and choice of estimating methods; and estimates of parameters by various methods. Part 2: Bayesian statistics and decision theory. Prerequisite: ECON 532 or equivalent.

ECON 536 Applied Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/536/)
Focus on specification, estimation, prediction and evaluation of econometric models. Covers instrumental variable estimation, simultaneous equation models, non-linear models, discrete choice models and quantile regression methods. Prerequisite: ECON 532 and ECON 535.

ECON 537 Behavioral Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/537/)
The intersection of behavioral economics and technology is explored, integrating psychological insights into economic models for understanding digital-age behavior. Key concepts like default effects and heuristic thinking are covered, showing deviations from neoclassical rationality. Applications focus on tech industry and policy, examining market design and choice architecture including ethical considerations. Through lectures and projects, behavioral economics' role in shaping markets and policy is developed, including governmental applications of these insights. Prerequisite: CS 225, CS 374, MATH 241, MATH 257, ECON 203, ECON 302 or their equivalents. Restricted to MS in Economics and Computer Science students, or with permission from the instructor.

ECON 538 Computational Game Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/538/)
The intersection of economics and computer science is explored, focusing on computational methods applied to strategic interaction problems. Game theory solutions for static and extensive-form games with complete and incomplete information are covered. Mechanism design is examined, exploring systems that incentivize desired behavior from self-interested agents through auctions, voting, and fair allocation. Algorithmic aspects including learning algorithms and computational complexity of finding equilibria are addressed. Applications in multi-agent learning, security, and electronic marketplaces are analyzed. Prerequisite: Restricted to MS in Economics and Computer Science students or consent of the instructor.

ECON 539 Market Design: Algorithms and Applications credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/539/)
The design of effective market mechanisms is explored, blending theoretical economic tools with computational approaches. Market analysis and engineering techniques are learned for improving resource allocation and efficiency in matching markets, auctions, and digital platforms. Practical applications are emphasized, drawing on real-world examples such as online advertising, school choice, and spectrum auctions, where case studies and empirical analyses are incorporated. Skills in both economic reasoning and algorithmic thinking are developed for designing and evaluating market mechanisms. Prerequisite: Restricted to MS in Economics and Computer Science students or with instructor permission.

ECON 540 Labor Economics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/540/)
Survey of recent trends in the labor force, of real and money earnings, and of the distribution of national income used as the basis for a critical economic analysis of contemporary English and American wage theory. Same as LER 540. Prerequisite: ECON 302 and ECON 303.

ECON 541 Labor Economics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/541/)
Economic issues and implications involved in hours of work, employment and unemployment, and trade union institutionalism (the impact of the trade union upon the basic institution of a free enterprise economy); emphasis in all cases on the development of appropriate public policy. Same as LER 541. Prerequisite: ECON 302 and ECON 303.

ECON 542 Collective Bargaining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/542/)
Same as LER 542. See LER 542.

ECON 543 Workplace Dispute Resolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/543/)
Same as LER 543. See LER 543.

ECON 547 Urban Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/547/)
Examines the microeconomic theory of urban land-use and spatial structure (static and dynamic models); analyzes externalities caused by traffic congestion; normative and positive analysis of the provision of local public goods; and public policy issues (i.e., slums and urban decline, pollution). Prerequisite: ECON 530 and ECON 533.

ECON 548 Adv Natural Resource Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/548/)
Same as ACE 510, ENVS 510, and NRES 510. See ACE 510.

ECON 549 Environmental Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/549/)
Examines both theory and policy applications in the environmental area; selectively reviews the literature to provide a framework for understanding the relevant economic relationships and the criteria appropriate for policy assessment; emphasizes the characteristics of major environmental problems and policy choices; and considers the valuation of environmental amenities and the conflict between environmental quality and growth. Same as ACE 516. Prerequisite: ECON 302 or consent of instructor.

ECON 550 Econ of Development and Growth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/550/)
Theories of economic development and growth. Covers the role of agriculture, trade, manufacturing, human capital, genetics, geography and culture in growth. Prerequisite: ECON 533 and ECON 534, or equivalent.

ECON 551 Topics in Development Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/551/)
Analyzes the newly developing economies, with emphasis on institutional factors affecting development and economic policy relating to development. Prerequisite: ECON 535 or equivalent.

ECON 553 Demand/Supply/Firms/Households credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/553/)
Same as ACE 502. See ACE 502.

ECON 555 Topics in Microeconomics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/555/)
Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 556 Topics in Microeconomics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/556/)
Studies quantitative techniques useful in economic analysis and decision making; single and systems of difference and differential equations; dynamic programming; Pontryagin maximum principle; interaction of multiplier and accelerator; von Neumann model; Turnpike theorem; growth models; and control systems. Prerequisite: MATH 415; ECON 533 and ECON 534, or equivalent.

ECON 557 Topics in Microeconomics III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/557/)
Studies bounded rationality and learning in economics. Topics include evolutionary learning in models. Prerequisite: MATH 415, ECON 533 and ECON 534 or equivalent.

ECON 562 Topics in Macroeconomics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/562/)
Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 572 Political Economy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/572/)
Microeconomic analysis of political decision making processes. Includes social choice, models of political competition, game-theoretic analysis of political institutions and lobbying. Same as PS 548. Prerequisite: ECON 530 or equivalent, or instructor's consent.

ECON 574 Econometrics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/574/)
Estimation of parameters for single-equation models; tests of hypotheses and confidence regions for regression models; large-sample theory in single-equation models; and Bayesian statistics in regression models. Prerequisite: MATH 415 and STAT 400.

ECON 575 Econometrics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/575/)
Considers the specification of models with systems of simultaneous equations; identification problem, distributed lag models, K-class estimators, maximum likelihood estimators, three-stage least-squares, and effects of specification errors. Prerequisite: ECON 574.

ECON 577 Topics in Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/577/)
Examines some standard econometric problems from the Bayesian perspective and compares Bayesian and classical inference. Prerequisite: ECON 574.

ECON 578 Large Sample Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/578/)
Same as STAT 575. See STAT 575.

ECON 580 Industrial Organization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/580/)
Theory of the organization of markets and firms, behavior of firms, functioning of competitive systems, and performance of markets.

ECON 581 Govt Regulation of Industry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/581/)
Microeconomic and econometric analyses of market failure and government response in selected industries; topics include economic effect of regulation, bureaucratic behavior, optimal policy, and strategies for regulatory reform. Prerequisite: ECON 530; ECON 580; or consent of Instructor.

ECON 582 Empirical Ind Organization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/582/)
Empirical Methods in Industrial Organization. Topics include: detection of anticompetitive behavior; estimation techniques that allow for product differentiation, endogenous entry and intertemporal decision-making; estimation and testing of auctions and other asymmetric information models.

ECON 585 Topics in International Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/585/)
Frontier advanced topics in international economics; subject matter varies. May not be repeated for credit. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 590 Individual Study and Research credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/590/)
Directed reading and research. Approved for both letter and S/U grading. May be repeated.

ECON 598 Workshop and Research Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECON/598/)
Workshops are offered in all areas of specialization in which graduate students are writing Ph.D. dissertations. The specific format varies, but in general workshop sessions include presentations by graduate students of thesis research, by faculty members of their current research, and by occasional outside speakers. Approved for S/U grading only. May be repeated. A minimum of 4 hours of ECON 598 is required of all students in the Ph.D. program. Prerequisite: Admission to the Department of Economics Ph.D. program.

ECON 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ECON/599/)
Preparation of thesis required of all students writing master's or doctoral theses in economics. Approved for S/U grading only. May be repeated in the same term or in separate terms.