# **ECONOMICS (ECON)**

### ECON 5101. European Economic History. (3 Credits)

The economic development of Europe from the Industrial Revolution to World War I. Emphasis on the economic and social factors that led to the industrialization of Europe.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205101)

## ECON 5128. Economic Rights. (3 Credits)

(Also offered as HRTS 5390.) Explores the conceptual bases, measurement, and policy applications of economic rights. Specific topics will include: child labor, the right to development, non-governmental initiatives, and the institutionalization of economic rights (e.g., constitutionalization versus statutory implementation versus discretionary policies).

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205128)

### ECON 5201. Microeconomics. (3 Credits)

Beginning graduate microeconomics covering consumer and producer theory, price determination, economic efficiency, and welfare analysis. **Enrollment Requirements:** Not open for credit to students who have passed ECON 2211Q.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205201)

### ECON 5202. Macroeconomics. (3 Credits)

Survey of the field: its historical foundations and development, conceptual framework, and application to current macroeconomic problems.

**Enrollment Requirements:** Not open to students who have passed ECON 2212Q.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205202)

## ECON 5301. Mathematical Economics. (3 Credits)

Use of mathematical concepts such as matrix algebra, optimization, and comparative statics, to study economic problems.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205301)

## ECON 5311. Applied Econometrics I. (3 Credits)

Statistical theory and linear regression applied to business and economic problems.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205311)

## ECON 5312. Applied Econometrics II. (3 Credits)

Enrollment Requirements: ECON 5311.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205312)

# ECON 5314. Causal Program Evaluation. (3 Credits)

(Also offered as PP 5314.) Survey of the statistical methods and tools commonly used to evaluate causal claims about the impact of public policies and programs. This course is a required Master of Public Policy course

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205314)

## ECON 5315. Financial Econometrics. (3 Credits)

Introduction to the mathematics of finance. Theoretical reasoning (proofs), modeling, useful simplifying approximations, and computing. Students will write basic programs in R.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205315)

### ECON 5317. Machine Learning for Economists. (3 Credits)

Machine learning techniques and causal inference. Applications to economic data.

Enrollment Requirements: Open to students in the Master of Science in Quantitative Economics program; others by consent.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205317)

#### ECON 5318. Panel Data Econometrics. (3 Credits)

Standard panel-data models, which apply to datasets that follow crosssections of individuals through time. Emphasis on determining when causal relationships can be inferred from panel data.

**Enrollment Requirements:** ECON 5312; open to students in the Master of Science in Quantitative Economics, others by instructor consent. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205318)

# ECON 5321. Programming and Computation with R for Economists. (3 Credits)

Basics of R programming. Objects, data structures, logical design, functions. Applications to matrix algebra, optimization, data visualization, and econometric analysis.

**Enrollment Requirements:** Open to students in the Master of Science in Quantitative Economics program; others by consent. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205321)

# ECON 5322. Open Source Programming with Python for Economists. (3 Credits)

Introduction to Python. Code structure; control flow; data input/output in various formats; testing and debugging.

Enrollment Requirements: Open to students in the Master of Science in Quantitative Economics program; others by consent.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205322)

# ECON 5323. Convex Optimization with Python. (3 Credits)

Methods of convex optimization, including linear, quadratic, and general constrained and unconstrained problems. Applications, using Python, in economics and finance.

**Enrollment Requirements:** Open to students in the Master of Science in Quantitative Economics; others by consent. Not open for credit to students who have passed ECON 4323.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205323)

## ECON 5326. Operations Research for Economics. (3 Credits)

Use of mathematical programming for optimization of input-output mixes, of delivery routes, of communication networks and for performance evaluation based on economic theory of producer behavior. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205326)

## ECON 5463. The Economics of Organization. (3 Credits)

Surveys the modern agency, transaction-cost, and evolutionary theories of organization. Topics include measurement and monitoring costs, asset specificity, incomplete-contracts theory, the dynamic capabilities approach, and alternative organizations.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205463)

### ECON 5495. Topics in Economics. (3 Credits)

May be repeated for a total of 9 credits

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205495)

#### ECON 5499. Independent Study in Economics. (1-3 Credits)

May be repeated for a total of 12 credits

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205499)

# ECON 5501. Writing and Communication for Economics and Business I. (2 Credits)

Practice in written and oral communication of economic ideas. Development of skills and techniques for success in business and professional environments.

**Enrollment Requirements:** Open to students in the Master of Science in Quantitative Economics program; others by consent. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%205501)

# ECON 5502. Writing and Communication for Economics and Business II. (1 Credit)

Application of skills from ECON 5501 to writing and presenting a research paper developed in a third-semester Master of Science in Quantitative Economics course.

Enrollment Requirements: ECON 5501.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%205502)

#### ECON 6201. Microeconomic Theory I. (3 Credits)

Neoclassical consumer and producer theory, choice under uncertainty, competitive and monopoly markets, and an introduction to general equilibrium.

**Enrollment Requirements:** ECON 5201 or ARE 5201. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206201)

## ECON 6202. Macroeconomic Theory I. (3 Credits)

A rigorous course in dynamic general equilibrium models. Emphasis on analytical techniques and numerical solution methods.

Enrollment Requirements: ECON 5202.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206202)

# ECON 6211. Microeconomic Theory II. (3 Credits)

Game theory, information, and related topics.

**Enrollment Requirements:** A grade of B- or better in ECON 6201. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206211)

## ECON 6212. Macroeconomic Theory II. (3 Credits)

Stochastic modeling, recent developments in the literature, and policy applications. Topics may include real business cycle theory, new classical economics, neo-Keynesian theory and growth models.

**Enrollment Requirements:** A grade of B- or better in ECON 6202. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206212)

## ECON 6301. Advanced Mathematical Economics I. (3 Credits)

An introduction to advanced mathematical topics with applications to economics. Topics and applications may include set theory, logic, topology, difference and differential equations, game theory, preference theory and matching models.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206301)

### ECON 6310. Econometrics I. (3 Credits)

First advanced course in econometrics methods used in economics. Properties of classical linear regression. Statistical theories that underpin econometric methods.

**Enrollment Requirements:** Open only to Economics graduate students. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206310)

## ECON 6311. Econometrics II. (3 Credits)

Large sample linear regression, time series analysis, maximum likelihood, GMM, and qualitative choice models.

Enrollment Requirements: ECON 6310.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206311)

## ECON 6312. Econometrics III. (3 Credits)

Special topics from recent advances in econometrics.

Enrollment Requirements: A grade of B- or better in ECON 6311. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206312)

# ECON 6400. Independent Study. (1-3 Credits)

Students pursue an in-depth study of an area of interest under the guidance of a faculty member.

May be repeated for a total of 9 credits

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206400)

# ECON 6411. Advanced Macroeconomics I. (3 Credits)

Advanced treatment of material covered in ECON 6202 and 6212.

Enrollment Requirements: ECON 6212.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206411)

# ECON 6412. Advanced Macroeconomics II. (3 Credits)

Advanced treatment of material covered in ECON 6202 and 6212.

Enrollment Requirements: ECON 6411.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206412)

# ECON 6441. Advanced Labor Economics I. (3 Credits)

Labor supply with an emphasis on the family. Applications in the area of demography, development, and health.

Enrollment Requirements: ECON 6211.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206441)

### ECON 6442. Advanced Labor Economics II. (3 Credits)

Labor demand and other applied topics in labor economics.

Enrollment Requirements: ECON 6211.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206442)

# ECON 6461. Industrial Organization Theory. (3 Credits)

Advanced treatment of the behavior and performance of firms in imperfectly competitive markets. Topics may include product differentiation, entry deterrence, advertising, industrial R&D, and mergers. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206461)

## ECON 6462. Empirical Industrial Organization. (3 Credits)

Advanced treatment of the behavior and performance of firms in imperfectly competitive markets. Topics include empirical estimation of demand and production functions; static models of competition in prices and quantities; empirical models of market entry and exit; single-agent dynamic models; and dynamic games.

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206462)

#### ECON 6463. Economics of Organization. (3 Credits)

Advanced treatment of material covered in ECON 5463. View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206463)

### ECON 6466. Environmental Economics. (3 Credits)

(Also offered as ARE 6466.) Economic analysis of environmental problems and corrective policy instruments. Theory of externalities and public goods, role of uncertainty and imperfect information in policy design, benefit-cost analysis, and non-market valuation. Applications to environmental problems (such as air and water pollution, hazardous waste, and occupational health and safety).

Enrollment Requirements: ARE 5201 or ECON 5201.

View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206466)

# ECON 6473. Economic Development: Microeconomic Issues. (3 Credits)

Overview of current literature on microeconomics of development, including human capital, internal structure of households, functioning of factor markets, and the role of institutions in mediating change. View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206473)

## ECON 6492. Teaching Economics. (1-3 Credits)

Acquisition, development and practice of teaching skills for effective instruction in Economics. Intended for Economics Ph.D. students in the first semester in which they are assigned as an Instructor of Record at UConn as well as for Ph.D. students in at least their second year who would like to improve their Economics teaching skills while teaching a course at UConn or at another institution.

## Enrollment Requirements: Instructor consent.

May be repeated for a total of 9 credits View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206492)

## ECON 6494. Graduate Seminar. (1 Credit)

Participation in departmental research seminars and presentation and discussion of original research projects.

May be repeated for a total of 8 credits

View Classes (https://catalog.uconn.edu/course-search/?details&code=ECON%206494)

## ECON 6498. Variable Topics. (3 Credits)

May be repeated for a total of 45 credits View Classes (https://catalog.uconn.edu/course-search/? details&code=ECON%206498)