ECONOMICS/MATHEMATICS

The major combines courses from the Mathematics department and the Economics department to give students an intense grounding in economic theory, mathematical methods, probability, and statistics. Emphasis is placed on practical economic research, such as how economics can be used to better understand business contracts and competition within industries. This major particularly benefits students interested in pursuing Economics at a PhD level.

Opportunities for Students

- **Economics Leadership Council:** The ELC is a network of alumni and professionals who strive to connect people in the Department of Economics and encourage academic excellence. They also coordinates social events, lectures, and guest speakers throughout the year to expose students to career opportunities.

- **Progressive Master’s Degree:** This program allows exceptional students the opportunity to earn both a BS and MS in only five years.

- **Study Abroad:** Take a global approach to your studies by investigating the transformation of Middle Eastern economics in Jordan, the emergence of the Pacific Rim in Japan, or the theories produced at one of the most noted colleges in the field, the London School of Economics.

- **Omicron Delta Epsilon:** ODE is one of the world’s largest and most prestigious academic honor societies working to recognize and honor outstanding academic achievements in economics, and promote closer ties between students and faculty.

Notable Courses

- **ECON 404: Games and Economics** — Analysis of strategic economic interactions. Topics include bargaining, insurance, patents, voting, environmental depletion, strategic trade, learning, reputation, strikes, corporate takeovers, and the provision of public goods.

- **ECON 318: Introduction to Econometrics** — Application of statistical methods to economic data; estimating economic relationships using regression analysis, testing hypotheses involving economic behavior, forecasting economic variables.

- **ECON 360: Public Finance** — Role of the government; income and corporate taxation; direct versus indirect taxation; optimal tax structure; public goods; public sector pricing; public debt and macroeconomic stability.

Bachelor of Science (BS) Requirements

Pre-Major Requirement*
• MATH 125: Calculus I

Economics Requirements*
• ECON 203: Principles of Microeconomics
• ECON 205: Principles of Macroeconomics
• ECON 303: Intermediate Microeconomic Theory
• ECON 305: Intermediate Macroeconomic Theory
• ECON 318: Introduction to Econometrics
• Two (2) additional 400-level ECON courses

Math Requirements*
• MATH 126: Calculus II
  or MATH 127: Enhanced Calculus I
• MATH 225: Linear Algebra and Linear Differential Equations
  or MATH 245: Mathematics of Physics and Engineering I
• MATH 226: Calculus III
  or MATH 227: Enhanced Calculus II
• MATH 407: Probability Theory
• MATH 408: Mathematical Statistics
• Two (2) additional 400-level MATH courses

Computing Requirement (select one)*
• ITP 110: Introduction to C Programming
• ITP 150: Introduction to Visual BASIC
• ITP 165: Introduction to C++ Programming
• CSCI 101: Fundamentals of Computer Programming

*This information is offered as a partial overview only. For additional information, including all major requirements, please consult the USC Catalogue or http://catalogue.usc.edu/schools/college/econ/undergraduate/. Updated as of August 2015.

**This does not represent all options in this category. For a complete list, please consult the USC Catalogue.