

# Economics, Ph.D.

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The Department of Economics offers a Ph.D. program in Economics. Drawing upon the School's strong quantitative tradition, it specializes in public choice, transportation economics, urban economics, econometrics, macroeconomics, and applied microeconomics. Admission is highly selective and is limited to students whose interests mesh closely with those of the faculty. By requiring a high degree of overlap between faculty and student research interests, the program offers extensive faculty contact within a tutorial framework. Motivated and well-qualified students find the graduate program highly attractive because of its small size and its great flexibility. Self-discipline and an inquiring mind are prerequisites.

The deadline for application for admission is December 1 for fall quarter. Students are admitted for winter or spring quarters only under exceptional circumstances. Late applications are considered on a space-available basis. All applicants must take the Graduate Record Exam (GRE) prior to the application deadline. Applicants whose primary language is not English must also submit Test of English as a Foreign Language (TOEFL) scores. To be considered for any financial aid (including a teaching assistantship), students who are not citizens of countries where English is either the primary or dominant language as approved by the UCI Graduate Council must submit a passing score from the Test of Spoken English (TSE).

The Master's degree may be awarded only to students admitted to the Ph.D. program who have completed the following requirements: The nine core courses in microeconomics (ECON 210A-ECON 210B-ECON 210C), macroeconomics (ECON 210D-ECON 210E-ECON 210F), and econometrics (ECON 220A-ECON 220B-ECON 220C), with no grade lower than a B and with a grade point average across all graduate courses of at least 3.1. Pass the written preliminary exam following the first-year courses at least at the Master's-pass level.

## Requirements

All students must show competence in the core areas of microeconomics, macroeconomics, and econometrics. This is done by taking the three-quarter required course sequences in microeconomics, macroeconomics, and econometrics, with no grade lower than a B and with a grade point average across these courses of at least 3.25. The Department may also require students to pass a written qualifying exam in one or more of the core course sequences after taking the courses.

Students take the oral candidacy examination based on their research. A student making satisfactory progress in the program will have advanced to Ph.D. candidacy before the beginning of their third year.

Students also must master two fields of economics by taking a two-course sequence (possibly including independent reading courses) and writing a research paper in each field. Students also must enroll for at least four quarters in the graduate colloquium, in which attendance at regular Economics faculty research colloquia is supplemented by discussion of the papers presented and additional reading. Students are encouraged to become conversant with areas of current economic research early in their graduate careers, in order to facilitate a timely transition from meeting course and field requirements to thinking through a dissertation research plan.

Two or three quarters before the expected completion of the dissertation, the dissertation committee will organize an oral examination of the candidate's dissertation prospectus. Ordinarily, the prospectus will describe in detail the dissertation, and will typically be accompanied by at least one completed chapter of the dissertation.

Students are expected to complete their dissertation by the end of their fifth year. The maximum time permitted for completion of the Ph.D. is six years.

## Ph.D. in Economics with a Concentration in Transportation

Students can also pursue a Ph.D. in Economics with a concentration in Transportation Economics. This option draws upon the transportation researchers on the campus within the School of Social Sciences, The Henry Samueli School of Engineering, The Paul Merage School of Business, and the School of Social Ecology. Students benefit from association with the Institute of Transportation Studies, which facilitates student research by providing research assistantships and interdisciplinary seminars on all modes of transportation.

## Requirements

Requirements for the concentration are the same as those described above with the following three exceptions:

- Instead of the third quarter of microeconomics and macroeconomics, students may substitute specified courses such as Discrete Choice Econometrics (ECON 223A) or Travel Demand Analysis I (ENGRCEE 220A).
- One of the student's two required fields of competence must be transportation economics; the other must be a related field such as urban economics, labor economics, industrial organization, or a transportation-related field from outside economics (such as travel demand and flow theory, urban and transportation policy analysis, environmental impacts of transportation, or urban and transportation planning) subject to the approval of the Director of Graduate Studies for Economics; and
- Students must take at least one additional course from a list of designated courses in transportation and related subject areas.

## Ph.D. in Economics with a Concentration in Public Choice

Students can also pursue a Ph.D. in Economics with a concentration in Public Choice. This is an interdisciplinary field, at the intersection of Economics and Political Science, which draws on quantitative tools to model the functioning of political institutions. Faculty from the Departments of Economics,

Political Science, and Logic and Philosophy of Science and from The Paul Merage School of Business are involved in research that supports the concentration.

### **Requirements**

Students who elect this concentration are admitted under the normal procedures for the program in Economics and must fulfill all the requirements for the Economics degree with the following modifications:

- a. One of the student's two required fields of competence must be public choice; included is a three-quarter core course in public choice, ECON 270A-ECON 270B-ECON 270C, which is jointly organized by faculty in the Departments of Economics and Political Science. (A background in economic theory is a prerequisite to this sequence.) The requirement for competence in a second field may be met with a one-quarter course, instead of two, if it provides sufficient fluency in the field; and
- b. Students must obtain a background knowledge in political science equivalent to that provided by a one-year undergraduate survey course, if they do not already have it.

## **Ph.D. in Economics with a Concentration in Monetary Policy and Central Banking**

Students can also pursue a Ph.D. in Economics with a concentration in Monetary Policy and Central Banking. The concentration draws on faculty's expertise in Monetary Policy and Central Banking - a number of UCI faculty members across the social sciences have experience working in and with central banks. This concentration provides students with the tools necessary for careers in monetary policy research or central banking.

### **Requirements**

Students who elect to earn a Ph.D. in Economics with a concentration in Monetary Policy and Central Banking are admitted under the normal procedures for the program in Economics, and must fulfill all the requirements for the Economics degree. In addition, a candidate for the concentration in Monetary Policy and Central Banking must:

- a. Fulfill the requirements for the macroeconomics subfield as one of the two fields of specialization required of all Economics Ph.D. candidates.
- b. Fulfill the requirements for either the international economics subfield or the econometrics subfield as the second of the two fields of specialization required of all Economics Ph.D. candidates.
- c. Students must take ECON 224A.
- d. Students' dissertations must be aligned with the research initiatives undertaken by central banks, as determined by the program director.

## **Program in Law and Graduate Studies (J.D./Ph.D.)**

Highly qualified students interested in combining the study of law with graduate research and/or professional qualifications in Economics are invited to undertake concurrent degree study under the auspices of UC Irvine's Program in Law and Graduate Studies (PLGS). Students in this program pursue a coordinated curriculum leading to a J.D. degree from the School of Law in conjunction with a Ph.D. degree in Economics. Additional information is available from the PLGS Program Director's office, 949-824-4158, or by email to [plgs@law.uci.edu](mailto:plgs@law.uci.edu). A full description of the program, with links to all relevant application information, can be found at the School of Law Concurrent Degree Programs website (<http://www.law.uci.edu/academics/interdisciplinary-studies/concurrent-degrees.html>).

UCI is a major research university and has an excellent library that offers in electronic and print formats more than 3.2 million volumes, as well as special interlibrary loan arrangements with the other University of California libraries. The School of Social Sciences provides computer rooms, conference rooms, and offices for graduate students. The Economics Department has a small library with current journals and unpublished working papers from other universities. Students also have access to advanced computing resources as well as PC and UNIX laboratories.

Currently, there are four research units that provide excellent research opportunities for Economics graduate students: the Institute of Transportation Studies, the Center for Research on Information Technology and Organizations, the Institute for Mathematical Behavioral Sciences, and the Center for Economics & Public Policy (CEPP), established in 2011, which seeks to improve analysis, formulation, and debate on economics-related public policy issues at the international, national, state, and local levels.