

# ECONOMICS

## Degree Requirements

### Master of Arts (M.A.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. (<https://gradschool.psu.edu/graduate-education-policies/>)

The M.A. degree in economics may be earned by satisfactorily completing 30 credits of appropriate course work, presenting a master's essay, and passing a final oral examination. The master's essay includes preparation of a paper which is written under the supervision of a faculty member. A minimum of 30 credits at the 400, 500 or 800 level is required, with at least 18 credits at the 500 level.

Code	Title	Credits
<b>Required Courses</b>		
ECON 501	Econometrics	3
ECON 502	Microeconomic Analysis	3
ECON 503	Macroeconomic Analysis	3
ECON 510	Econometrics I	3
ECON 521	Advanced Microeconomic Theory	3
ECON 533	Applied and Quantitative Economics	3
ECON 596	Individual Studies	3
<b>Electives</b>		<b>3</b>
<b>Culminating Experience</b>		
ECON 530	Master's Scholarly Essay I	3
ECON 531	Master's Scholarly Essay II	3
<b>Total Credits</b>		<b>30</b>

### Doctor of Philosophy (Ph.D.)

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The Ph.D. program has 3 main parts taken in sequence: the core, subfields (of specialization), and the dissertation. Most students take 5 years to complete the program. Occasionally, but rarely, a student finishes in 4 years.

#### The Core

The core consists of 2 semesters of course work: a 2-semester sequence in microeconomic theory (ECON 502 Microeconomic Analysis and ECON 521 Advanced Microeconomic Theory), a 2-semester sequence in macroeconomic theory (ECON 503 Macroeconomic Analysis and ECON 522 Advanced Macroeconomic Theory), a 2-semester sequence in econometrics (ECON 501 Econometrics and ECON 510 Econometrics I), and a course in mathematics for economists (ECON 500 Introduction to Mathematical Economics).

At the beginning of the third semester, students are required to take 3-hour qualifying exams: one in microeconomics, one in macroeconomics, and one in econometrics. Students with prior graduate training may, however, obtain permission to skip some of the course work in the core and take the qualifying exams earlier than the 3rd semester. Students in good academic standing may be allowed to substitute a qualifying research project for the 3 qualifying exams conditional on the approval of the DGS.

In their second year, all students must enroll in ECON 512A (1 credit offered in the fall). This course introduces students to computational methods used to numerically solve and simulate economic models and program econometric estimators. Also, all students in their second year must enroll in ECON 512B (2 credits offered in the spring semester). This course is a continuation of ECON 512A covering the modern computational methods used in both theoretical and empirical research in economics. Students will be required to work on a small project involving data analysis.

#### Subfields

Students must demonstrate competence in 3 subfields. Competence in a subfield is usually demonstrated by completing 6 credits in the subfield with no grade lower than a B. The department offers the following subfields:

- development economics
- econometrics
- game theory
- industrial organization
- international economics
- macroeconomics

With the permission of the student's adviser and the Director of Graduate Studies, a student may take a course that will count towards the subfield in another department. For instance, students have taken courses in Demography, Political Science, and Statistics.

#### 3rd-Year Paper

Students must complete a paper by the end of their 5th semester, the fall semester of their 3rd year. The paper must be approved by a 3-person faculty committee. The paper must contain original research and must be written in a form suitable for submission to a journal. Students must attend the Knowledge Transfer course in the fall semester of their third year.

#### Dissertation Research

Most dissertations consist of several essays, each of which has the substance and quality of a journal article. However, a dissertation which has the substance and quality of a single major article in a leading journal is also acceptable. The comprehensive exam (dissertation proposal defense) must be completed before fall semester of 4th year. The student's Ph.D. committee will be nominated to the Graduate School prior to the comprehensive exam (typically this will occur more than 12 months after the qualifying exam).

The student will spend the 4th year and the beginning of the 5th year completing the dissertation and will use the summer after the 4th year and the beginning of the 5th year in preparation for the job market. The dissertation must be accepted by the Ph.D. committee, the Head of the Graduate Program, and the Graduate School, and the student must pass a final oral examination (the dissertation defense).

#### Good Standing

A student must remain in "good standing" while in the program. This means following the course sequence outlined above, maintaining a GPA of at least 3.0 and completing the qualifying, third-year paper, and comprehensive exam requirements on time.