

DOCTORAL DEGREE

The Ph.D. is granted to those who have gained a comprehensive knowledge and understanding of theoretical and applied economics. Only those who show promise of superior attainment are admitted to candidacy.

The minimum requirements for admission into the Ph.D. program are: undergraduate GPA 3.0, GRE verbal 400, GRE quantitative 700, TOEFL 550 (foreign applicants only). In addition, only applicants with an adequate background in economics, mathematics and statistics are admitted.

The Ph.D. program is designed to encompass training in economic theory and quantitative methods, as well as flexibility for students in choosing course work to suit their interests and intended careers. For those entering the program with a bachelor's degree, the following courses are required:

- Stat 7710 (mathematical statistics);
- Econ 7370 (quantitative economics);
- Econ 8451, Econ 9451 and Econ 9452 (microeconomics);
- Econ 8453, Econ 9453 and Econ 9454 (macroeconomics);
- Econ 8472, Econ 9473 and Econ 9474 (econometric methods);
- 6 credit hours of Econ 9413 (PhD research workshop);
- 6 credit hours of 9000-level economics courses in each of two areas of specialization;
- Two other 9000-level economics courses (excluding 9090 and 9480);
- Econ 7340 (game theory) or other class approved by the Director of Graduate Studies; and
- 12 credit hours of dissertation research (for a total of 72 credit hours).

Courses taken to satisfy these requirements (except dissertation research) may be taken while earning an MA at MU, or, as with students entering the program with prior graduate coursework, at other accredited colleges and universities as recommended by the Graduate Studies Committee.

Qualifying Examination: Students pursuing the Ph.D. degree must pass a qualifying examination. Upon completion of relevant required courses in the first year, students take the qualifying examination,* which is a written examination that covers microeconomic concepts, calculus, matrix algebra, optimization, statistics and econometrics. The exam is 6 hours in length, usually administered in parts over two days. The exam must be taken in May following the first year of graduate study and is graded in three levels: 0, 1, and 2. Students who receive a score of 2 pass the exam. Students who receive a score of 1 may retake the exam the following August. Students who receive a score of 0 fail and may not continue in the Ph.D. program. Only pass and fail grades will be awarded on the August exam. Students who fail the exam may continue in the MA program.

Comprehensive Examination: Students pursuing the Ph.D. degree must pass a comprehensive examination. The comprehensive exam has a written section and an oral section. Upon completion of required courses in the second year, students take the written portion of the comprehensive examination, which covers all second-year courses (Microeconomics, Macroeconomics, and Econometrics). The exam is 6 hours in length; it is administered in parts, with two-hours devoted to each of the three core subjects. The first offering of the exam is in May. Students who fail to pass all three parts of the exam the first time may retake the failed part(s) the following August. Students who fail the written exam may continue

in the MA program. The oral portion of the comprehensive exam is administered by the student's dissertation committee as part of the dissertation proposal defense. At the discretion of the student's dissertation committee, written questions over the fields relevant to the proposal may be included as part of the proposal defense.

Fields: Students are required to complete a course of study in two defined areas of specialization. It is expected that one of the areas will be related to the objectives of the student's dissertation. The exact areas of specialization from which the student can choose are listed below. Each course of study consists of two classes in the area followed by a research paper. Students are required to receive a passing grade in each course along with a passing grade on the research paper. The instructors of the field courses oversee the content of the research paper and the instructor of the Ph.D. research workshop (9413) oversees the mechanics of the paper. A field requirement is satisfied after both field course instructors and the 9413 instructor sign off on the paper. Students are not allowed to combine courses from separate fields. The department commits itself to offering a second course in any field to all students who have completed an initial course in the field, within two semesters of the student completing the initial course (not counting the summer semester). This course may consist of a readings course with one of the faculty members in the field in lieu of a regular course. If a readings course is provided, then the faculty member is required to provide the department with the reading list for the course.

List of fields and courses:

Econometrics – Economics 9476 and 9477

Industrial Organization – Economics 9455 and 9456 or 9471

International Economics – Any two of Economics 9425, 9426, 9427, or 9460

Labor Economics – Economics 9411 and 9412

Monetary Economics – Economics 9430 and 9431

Public Economics – Economics 9415 and 9416

Public Policy – Public/International – Economics 9415 or 9416 and Economics 9425, 9426, 9427, or 9460

Quantitative Microeconomic Policy Analysis – Economics 9446 and 9447

Dissertation: The dissertation must make a substantial contribution to knowledge. Upon completion of the dissertation, students pursuing the Ph.D. degree must pass a final oral examination. This exam can include an evaluation of the dissertation, the student's defense of the dissertation, and the student's general comprehension of economics, and is open to the academic community.

Statement on Satisfactory Progress: I) Taking and completing required course work on schedule and maintaining a GPA of at least 3.0. II) Enrollment in a full-time program of study, i.e., completion of at least nine graded hours per semester. III) Taking and passing qualifying and comprehensive examinations on schedule. IV) Students who have completed all course work and are working on the final stage of the PhD program are encouraged to present their written proposal within a reasonable amount of time.

* Applicants with outstanding background may be selected by the Graduate Studies Committee to be offered the opportunity to take the August qualifying exam prior to the start of their first semester. Such students who pass the August qualifying exam will move directly to second year courses. Students who fail will start with the normal first year courses.

Ph.D. Required Plan of Study

(All courses are 3 semester credit hours except as noted)

Fall Semester Year 1

Econ 7370: Quantitative Economics
Stat 7710: Intro to Mathematical Statistics
Econ 7340: Game Theory
(or other class approved by DGS)

Spring Semester Year 1

Econ 8451: Microeconomic Theory
Econ 8453: Macroeconomic Theory
Econ 8472: Econometric Methods I

Qualifying exam, end of Spring Semester Year 1.

Fall Semester Year 2

Econ 9451: Advanced Micro Theory I
Econ 9453: Advanced Macro Theory I
Econ 9473: Econometric Methods II

Spring Semester Year 2

Econ 9452: Advanced Micro Theory II
Econ 9454: Advanced Macro Theory II
Econ 9474: Econometric Methods III

Core portion of comprehensive exam, end of Spring Semester Year 2.

Fall Semester Year 3

Econ 9413: Ph.D. Research Workshop (1 hr)
Area of specialization #1 (course 1)
Econ 9xxx: Economics Elective

Spring Semester Year 3

Econ 9413: Ph.D. Research Workshop (2 hrs)
Area of specialization #1 (course 2)
Econ 9xxx: Economics Elective

Field paper for area of specialization #1 completed, end of Spring Semester Year 3.

Fall Semester Year 4

Econ 9413: Ph.D. Research Workshop (1 hr)
Area of specialization #2 (course 1)

Spring Semester Year 4

Econ 9413: Ph.D. Research Workshop (2 hrs)
Area of specialization #2 (course 2)

Field paper for area of specialization #2 completed, end of Spring Semester Year 4.

Dissertation proposal presented/field portion of comprehensive exam, beginning Fall Semester Year 5.

Fall Semester Year 5

Econ 9090 (6 hrs)

Spring Semester Year 5

Econ 9090 (6 hrs)

Final oral examination.