

# QUANTITATIVE ECONOMICS, PH.D.

The Ph.D. program in Quantitative Economics is designed to provide students with the advanced training and substantive knowledge necessary to pursue positions in economics at research and teaching institutions of higher learning, or in the private sector and in public offices within local, state, or federal government.

## Admissions Requirements

**In addition to the minimum Graduate School admission requirements, to be considered for regular admission an application must include:**

- Resume
- 3 Letters of Recommendation
- GRE score with a quantitative score of at least 160 and a verbal score of at least 155
- At least a B (3.0 out of 4.0) for the last two years of coursework
- TOEFL score of at least 79 or an IELTS score of at least 6.5, a PTE score of at least 59 for non-native English speakers who are required to submit an English Language Test score (see admissions criteria link below).
  - Please note that this program does not accept a Duolingo Test score.

Students who do not meet the minimum standards may be offered "Admission with Permission to Continue" on a case-by-case basis.

See the Admission Criteria section of this catalog for more information.

## Curricular Requirements

The following courses are required for the Economics Ph.D. They are listed in the order that they should be taken. Students receiving an assistantship or fellowship through the University of Alabama are obligated to take these classes in the sequence detailed below. The economics faculty strongly urges students who do not receive financial support from the university to take the courses in the designated sequence.

### The First Year

Required Courses	Hours
<b>Summer/Fall</b>	
EC 600      Advanced Mathematical Economic	3
<b>Fall</b>	
EC 610      Seminar In Microeconomic Theor	3
EC 611      Sem in Macroeconomic Theory	3
EC 670      Econometrics	3
<b>Spring</b>	
EC 660      Game Theory	3
EC 661      Macroeconomic Theory II	3
EC 671      Seminar : Econometrics	3
<b>Total Hours</b>	<b>21</b>

#### Footnotes

1. After the first year (and passing the Qualifying exams), students must take six (6) field and tool courses and at least two (2) supplementary courses.

## Field Courses

Required Courses, Group A and Group B (18 hours - 6 courses)	Hours
<b>Group A - Tool Courses for Economic Research (at least 6 hours)</b>	
EC 672      Financial Econometric Modeling	3
EC 673      Nonparametric Econometrics	3
EC 674      Experimental Economics	3
EC 597      Special Topics In Economics (Bayesian Economics)	3
EC 597      Special Topics In Economics (Causal Inference)	3
<b>Group B - Topic Courses (at least 6 hours)</b>	
EC 612      Sem Industrial Organizat	3
EC 624      Political Economy	3
EC 597      Special Topics In Economics (Environmental Economics)	3
EC 597      Special Topics In Economics (Urban Econ)	1 to 6
EC 613      Empirical Industrial Organizat	3
EC 614      Behavioral Economics	3
EC 616      Sem Monetary Economics	3
EC 597      Special Topics In Economics (Dynamic Stochastic General Equilibrium)	3
EC 597      Special Topics In Economics (Other Special Topics (Ph.D. level))	3

**Supplementary Courses (at least 6 hours) see footnote 2. Consult your Ph.D. coordinator and dissertation chairperson for course approval.**

#### Footnotes

1. Note that these are the courses that have been offered previously or currently in the department. As faculty changes, so will the tool and topic courses available. For any questions regarding which courses are considered tool or topic courses, contact the Economics Ph.D. Coordinator.

#### Footnotes

2. Students must choose at least two (2) additional courses. If a student chooses a supplementary course from Group B, they are allowed to take the course pass/fail. Note that core courses, topic and tool courses (Group A and B), and supplementary courses from Group A must be taken for a letter grade. Only supplementary courses from Group B can be taken as pass/fail. Students may also take courses outside of the department as a supplemental course, with faculty advisor permission. For example, students can take a computer programming course as one of the supplemental courses.

## Research Development Courses

Research Development Courses	Hours
EC 697      Special Topics in Economics	
EC 698      Research In Economics (Prof Development Workshop, at most 18 hours. )	
EC 699      Dissertation Research (at least 18 hours after candidacy)	

### Footnotes

1. Once a student has entered candidacy, he or she should fill the remaining 9 credit hours taken each semester with EC 699. For example, a student in his/her fourth year who has completed all coursework should register for EC 698 and 6 credit hours of EC 699. A student in his/her third year is taking one supplementary course should also register for EC 698 and 3 credit hours of EC 699.

## Transfer Credit

In rare circumstances, Economics Ph.D. students are allowed to transfer a previously taken course and to substitute a required course by taking another graduate economics course. Approval must be granted prior to starting the class that is serving as a substitute.

Graduate School information on Transfer Credit.

## Doctoral Plan of Study Requirement

Graduate School Information on the Doctoral Plan of Study can be found here.

## Comprehensive/Qualifying Exam

Students are required to pass a Qualifying Examination, which is administered at the end of the first year. The exam consists of two separate qualifying exams: microeconomics and macroeconomics, both exams are generally administered during the first full week in June. *To be eligible to continue in the Ph.D. program, students must pass both exams.*

- Upon successfully passing both exams, the Doctoral Qualifying Exam Form must be completed and signed by the committee members and the Ph.D. Coordinator and the Department Head. The form is then forwarded to the Culverhouse College of Business Dean for signature, and finally to the Graduate School.
- Students who do not pass one or both exams will be given one chance to retake the failed exam(s). Students are only required to retake the exam they failed. *The retake exam(s) are usually administered the last full week in August prior to classes starting.*
- If a student is absent from an exam without prior approval, it will be counted as a failed attempt.
- A student who has not passed both exams after two attempts will not be allowed to continue in the Economics, Ph.D. program, but is eligible to obtain a Master's degree.

## Admission to Candidacy Requirement

After passing the qualifying exams and completing the second years course work, the student begins working at a dissertation.

- The student must ask a faculty member to serve as Chairperson of their Dissertation Committee.
- The Chairperson must be identified prior to the start of the third year.
- The Chairperson must be approved by the Economics Ph.D. Coordinator and Department Head.

## Continuous Enrollment Policy

Graduate School Information on Continuous Enrollment.

## Dissertation Requirements

During the third year, students are expected to commence work on the dissertation. Students are expected to have identified a primary advisor by the start of the fall semester of their third year and formally begin work on their dissertation.

- Writing a dissertation is the final test of research skills. It requires an understanding of relevant literature and methodology, as well as the ability to think independently. Ph.D. candidates must find an original topic, plan a test of hypotheses, propose this topic to their committee, and write and defend at a final oral examination a document acceptable to the dissertation committee and to the Graduate School.
- The dissertation committee consists of at least 5 members, including the Chairperson.
- The student must propose their dissertation prior to April 30th of the fourth year to guarantee fifth year funding. If a student has not successfully proposed a dissertation by this time, the student may lose departmental funding and will be viewed as not making sufficient progress.

## Time Limits for Degree Completion Requirements

Graduate School information on Time Limits.

## Academic Misconduct Information

Graduate School Information on Academic Misconduct.

## Withdrawals and Leave of Absence Information

Graduate School Information on Withdrawals and Leave of Absence.

## Academic Grievances Information

Graduate School Information on Academic Grievances.

## Grades and Academic Standing

Graduate School Information on Grades and Academic Standing.

## Graduate School Deadlines Information

Information on Graduate School Deadlines.

## Application for Graduation Information

Information on the Application for Graduation.