The PhD program in applied economics is small and focused, specializing in industrial organization, competition policy, and regulatory economics and labor economics.

Requirements

Students entering the doctoral program without a master's degree, please see Economics PhD (http://catalog.northeastern.edu/graduate/social-sciences-humanities/economics/economics-phd).

COURSE WORK

Students entering the doctoral program with a master's degree will take three doctoral-level core classes (12 semester hours), two classes in each of two doctoral fields (16 semester hours), and one elective (4 semester hours), for a total program requirement of 32 semester hours. If the master's degree is not in economics, additional course work may be required in order to meet course prerequisites. Core courses are focused on developing an advanced theoretical and quantitative foundation (macroeconomic theory, microeconomic theory, and applied econometrics). The remainder of the course work is focused on the sophisticated application of analytical tools in the chosen field of concentration.

PhD students are expected to take three classes per semester as necessary to meet the degree's course work requirements in the minimum number of semesters.

EXAMINATIONS

Two Qualifying Examinations—Macroeconomics and Microeconomics

Qualifying examinations are required upon completion of Macroeconomics 2 and Microeconomics 2. Students must receive a minimum grade of B—in the associated theory class to sit for its exam. Students are given a maximum of two attempts to pass each exam to continue in the program. Failure to sit for an exam at the appropriate time without prior consent of the graduate program director will result in an automatic fail on that exam.

One Field Comprehensive Examination

A field examination is required upon completion of the associate field classes. Students will complete course work in two fields but are required to take a field examination in one field of their choosing. Students must receive a minimum grade of B—in the associated field classes in order to sit for that field's exam. The field examination includes questions from the chosen field, as well as questions on econometrics methodology. Students are given a maximum of two attempts to pass the exam to continue in the program. Failure to sit for an exam at the appropriate time without prior consent of the graduate program director will result in an automatic fail on that exam.

DOCTORAL DEGREE CANDIDACY

Following completion of required course work and examinations, students are certified as doctoral degree candidates (ABD). A degree candidate has a maximum of five years to defend and submit an acceptable doctoral dissertation.

DISSERTATION COMMITTEE AND PROPOSAL

The department expects that a doctoral candidate's dissertation committee will be formed and the dissertation proposal presented within six months of reaching degree candidacy.

A dissertation committee includes a principal advisor and a minimum of two other members. The principal advisor must be a current member of the economics department who holds a PhD degree and who is qualified in the chosen field. Other committee members must be qualified in the chosen field or econometrics, and one member may be from outside the department. Committee compositions must be approved by the graduate program director and department chair.

A dissertation proposal states the question or hypothesis, reviews the relevant literature, and explains how the proposed work will contribute to that literature and general understanding. The proposal sets forth data sources, models, and econometric issues in sufficient detail so that any faculty member not in the field will be able to assess its merits. Normally, the proposal should not exceed twenty double-spaced pages. The proposal is first approved by the dissertation committee and then presented at an open seminar.

WRITING THE DOCTORAL DISSERTATION

Writing the dissertation entails working with the principal advisor and other committee members until it is determined that a dissertation is complete, and the candidate is ready to present and defend the work at an open seminar. Candidates must arrange a date and time for the defense at least three weeks in advance. Students must familiarize themselves with the Guide to the Preparation of Theses and Dissertations (https://www.northeastern.edu/cssh/graduate/commencement/formatting-guidelines). The guide provides links to formatting tips, sample introductory pages, sample approval record, and deadlines. In addition, a checklist is provided to ensure students have fulfilled the required steps in the commencement clearance process.

MILESTONES

Maintaining satisfactory academic progress during doctoral candidacy requires the following:

PhD Annual Student Progress Review
Each PhD student will have an annual review of his or her progress toward the degree. Receipt of financial support administered by the college is contingent upon satisfactory academic progress toward the degree and satisfactory performance in assigned duties. See the College of Social Sciences and Humanities Graduate Programs General Regulations (https://www.northeastern.edu/cssh/graduate/current_students) for further details.

Field Lunch Participation
All PhD students registered for Doctoral Dissertation or Continuation who are in residence are expected to regularly attend a field seminar in industrial organization or labor. These seminars meet roughly every week, and their purpose is to assist students in choosing and evaluating dissertation topics as well as advancing and completing their dissertation. All doctoral candidates will be expected to present their research at various stages of writing their dissertation.

Seminar Series Participation
All PhD students registered for Doctoral Dissertation or Continuation who are in residence are expected to regularly attend academic seminars by speakers invited to campus through the Department of Economics Seminar Series. Participation in these seminars is an important
component of doctoral training and is intended to expose students to current research in their field while helping to develop and hone their own presentation skills.

**Practical Experience in Applied Economics Program**
Participation in at least one semester of the Practical Experience in Applied Economics program is required of all students who have reached doctoral candidacy. The program is offered in the spring semester every other year. In this program, a variety of prominent practitioners working in consulting and government agencies in the fields of industrial organization and labor will describe their practical experience applying economics to a variety of consulting and policy problems, including antitrust, regulation, labor market policy, education, and health policy. This is a participatory class that will require advanced reading and preparation of questions for the practitioners in addition to other assignments.

**Program Requirements**
Complete all courses and requirements listed below unless otherwise indicated.

**Milestones**
Two qualifying examinations—microeconomics and macroeconomics
Field comprehensive examination (student chooses field)
Doctoral degree candidacy
PhD annual student progress review
Dissertation committee
Dissertation proposal
Dissertation defense
Field lunch participation
Seminar series participation

**Core and Field Requirements**

**Quantitative Courses**
- **ECON 7740** Applied Econometrics 2
  - 4

**Theory Courses**
- **ECON 7710** Microeconomic Theory 2
  - 4
- **ECON 7720** Macroeconomic Theory 2
  - 4

**Field Courses**

**Labor Economics Field**
- **ECON 7763** Labor Market Analysis
  - 4
- **ECON 7764** Topics in Labor Economics
  - 4

**Industrial Organization Field**
- **ECON 7771** Framework of Industrial Organization
  - 4
- **ECON 7772** Public Policy Toward Business
  - 4

**Elective Course**

Complete 4 semester hours from the following:
- **ECON 7200 to ECON 7299**
- **ECON 7976** Directed Study
- **ECON 8982** Readings

**Field Exam and Writing the Dissertation**
Registration in the following class is required in the semester prior to sitting for the field examination:
- **ECON 8960** Exam Preparation—Doctoral

Registration in the following class is required in the semester that students sit for the field examination and begin dissertation planning:
- **ECON 9986** Research

**Program Credit/GPA Requirements**
32 total semester hours required
Minimum 3.000 GPA required