

ECONOMICS, PH.D.

The Ph.D. in Economics is offered to superior applicants who hold a bachelor's or a master's degree in economics and seek careers in academic departments that focus on public policy and applied microeconomics, in nonacademic research organizations, in business and financial institutions, and in agencies of federal, state and local governments. The program is structured to develop the theoretical, quantitative, and statistical skills that are required to perform and interpret economic analyses on a wide range of policy-oriented issues. Our doctoral program is specifically designed to train students in the fields of labor, health, and public economics (including the economics of education, science and technology policy, urban economics, and resource and environmental economics).

The degree requires 45-72 credit hours.

Student Learning Outcomes

- **Economic Theory.** Students will display a mastery of microeconomic theory in the mathematical analysis of individual choice behavior and social interaction equilibria.
- **Econometrics.** Students will demonstrate the properties of common econometric procedures and apply those procedures to the analysis of economic data.
- **Integration of Economic Theory and Econometrics.** Students will integrate economic theory and econometric methods in the critical analysis of empirical economic issues.
- **Explain Advanced Economic Analysis.** Organize and integrate critical analyses of technical economic literature suitable for professional economists.

For information regarding deadlines and requirements for admission, please see <https://grs.uncg.edu/programs/>.

Admission to the program requires the submission of a completed application including Graduate Record Examination (GRE) test scores and an undergraduate degree with the following course work:

- Intermediate Microeconomics
- Intermediate Macroeconomics
- Mathematical Economics (or equivalent course work in mathematics and statistics)
- Econometrics (or equivalent course work in mathematics and statistics)

Admission to the program may also be granted to applicants with equivalent course work at the master's level. Prior master's course work in economics may be considered to waive some program course requirements and allow accelerated study. At minimum, the program will consist of 45 credit hours and may take up to 72 total credit hours if the prior degree does not fully cover these course requirements.

Degree Program Requirements

Required: 45-72 credit hours

Code	Title	Credit Hours
Core Knowledge Courses (0-15 credits)		
May be required if equivalent courses have not been completed: ¹		
ECO 701	Microeconomics I	0-15

ECO 702	Macroeconomics	
ECO 705	Econometric Methods	
ECO 728	Research Methods in Applied Economics I	
Advanced Theory and Methodology (9 credits)		
ECO 742	Advanced Microeconomic Theory	3
ECO 745	Advanced Econometric Theory	3
ECO 748	Research Methods in Applied Economics II	3
Empirical Field Courses (12-18 credits)		
Select four to six courses (12-18 credits) from the following: ²		12-18
ECO 730	Introduction to Cost Effectiveness	
ECO 731	Applied Policy Methods	
ECO 734	Public Policies Toward Innovation	
ECO 735	Labor Economics ³	
ECO 736	Public Economics ³	
ECO 737	Empirical Health Economics ³	
ECO 738	Topics in Economics ³	
ECO 739	Independent Field Course ³	
ECO 747	Time Series ³	
ECO 749	Economics Internship	
ECO 750X	Experimental Course ³	
Supervised Independent Field Research (12 credits)		
ECO 797	Seminar in Empirical Economics	6
ECO 798	Seminar in Economic Research	6
Dissertation Research (12-18 credits)		
ECO 799	Dissertation	12-18
Total Credit Hours		45-72

¹ As indicated by the student's master's transcript.

² Eighteen credit hours of field studies will be required unless otherwise specifically approved by the Doctoral Advisory Committee and Graduate Program Director.

³ Which may be repeated for credit if estimation methods are introduced in the context of non-overlapping economic applications and/or students are introduced to different methodological approaches of estimating time series models.

Required Milestones*

- **Residency (Immersion)** – Doctoral students in the on-campus program are expected to satisfy a residence requirement, which provides them the opportunity for an extended period of intensive study and intellectual and professional development among a community of scholars. The basic requirement is two consecutive semesters (minimum of 6 credits per semester) of graduate course work (excluding independent study and dissertation hours) on the Greensboro campus after admission to a doctoral program. The online Ph.D. program requires three campus visits. The first is to take place prior to a student's first semester. The purpose of the second visit is to take the qualifying exams and to meet with the dissertation committee to agree on a plan of study. The third and final visit can be the proposal defense, the dissertation defense, or a second in-person meeting with the committee at another time. University requirements aside, a critical aspect of the graduate experience is participation in events beyond the course work requirements. Graduate students are expected to attend professional conferences, seminars, lectures, and Brown Bags, and participate in professional development activities sponsored by the Department, the Bryan School, or the Graduate

School. Economics graduate students are highly encouraged to present and/or publish their research.

- **Qualifying Exams** – In addition to the course requirements, doctoral students must pass two Ph.D. qualifying examinations. These examinations take place typically after the first year of doctoral studies following the completion of the advanced theory course work and will focus on a student's comprehensive knowledge in the areas of economic theory and econometrics, respectively. Students are required to pass both examinations in order to retain placement in the doctoral program. Students who do not pass either or both examination(s) may retake the failed examination(s) one time.
- **Advisory/Dissertation Committee** – Students must form an Advisory/Dissertation Committee before the end of their first year. The committee (minimum of three members) must be formalized with the Graduate School. The Committee Chair will serve as the student's primary advisor and mentor throughout their dissertation.
- **Research Competency** – Work on the dissertation proposal takes place in supervised research seminars under the guidance and supervision of the student's Advisory/Dissertation Committee: ECO 797 Seminar in Empirical Economics and ECO 798 Seminar in Economic Research. The preliminary written and oral examination takes place after submission of the dissertation proposal and is expected to occur by the end of the semester in which the student completes the ECO 798 requirement.
- **Plan of Study** – The Graduate School requires students to file a plan of study outlining all the courses they will take or have taken to meet the requirements of your graduate degree. Graduate students are expected to file a preliminary plan of study with the Graduate School no later than the semester in which they complete 18 credits of graduate study. This preliminary plan is completed by the student in consultation with the Director of Graduate Study and must be approved by the student's dissertation committee chair and members.
- **Written Dissertation Proposal and Written Part of the Comprehensive Examination** – The student will prepare a written Dissertation Proposal and submit that written proposal to their dissertation committee. Following that submission, the written part of the Comprehensive Examination is scheduled and prepared by the dissertation advisor with the assistance of the dissertation committee. Questions may cover any aspect of the course work taken by the student during the period of this graduate study or any subject logically related and basic to an understanding of the subject matter of the major area of study. Any transferred course work is subject to examination at the time of the comprehensive examination.
- **Oral Part of the Comprehensive Examination and Oral Presentation of the Dissertation Proposal** – The oral part of the Comprehensive Examination should be scheduled within one month following the written part of the Comprehensive Examination, and the entire dissertation committee must participate. The oral part of the comprehensive Examination will consist of an oral presentation of the dissertation proposal and a discussion in which the student responds to questions posed by the dissertation committee and which occurs after the oral presentation of the dissertation proposal. The content of these questions is at the discretion of the dissertation committee.
- **Assessment** – After the oral part of the Comprehensive Examination has concluded, the dissertation committee meets privately to evaluate the dissertation proposal, the written part of the Comprehensive Examination, and the oral part of the Comprehensive Examination. The committee then decides whether the student has passed without conditions, passed conditionally, or failed the preliminary examination. The student is then informed of the result.
- **Admission to Candidacy** – A minimum of 12 credits will be devoted to research that culminates in the preparation of the required doctoral dissertation.
 - Before registering for dissertation credit (ECO 799 Dissertation), Ph.D. students should be admitted to candidacy by the Graduate School. To make formal application for admission to candidacy, the student must have completed all major required courses, have passed their qualifying examinations, have submitted a dissertation proposal that has been approved by their advisory/dissertation committee, and have passed both the written and oral parts of their Comprehensive Examination.
 - After being admitted to candidacy for the doctoral degree, the candidate must prepare and present a dissertation that reflects an independent investigation of an economic topic that is acceptable in form and content to the students Advisory/Dissertation Committee and the Graduate School.
- **Dissertation Defense** – Doctoral candidates will successfully pass an oral examination of their independent dissertation study to members of their doctoral committee. The defense must be formally scheduled with the Graduate School at least two weeks in advance. The defense is open to all members of the University community who may wish to attend, as required by state laws on public meetings. However, the deliberations of the Dissertation Committee are private.
- **Filing the Final Approved Dissertation** – The Graduate School requires electronic dissertation submission. The dissertation must be filed in compliance with Graduate School policies and guidelines for acceptable formatting and deadlines. The Graduate School dissertation templates should be used to mitigate errors or delays.
- **Job Market Paper** – Along with the process of preparing and defending a dissertation, graduating Ph.D. students are expected as an integral part of the dissertation process to prepare a job market paper in preparation for job interviews. Doctoral students planning to participate in the market are expected to have a completed market-ready paper and presentation prepared no later than September of the preceding year.

* *General information about milestones for doctoral programs is available in Section III (<https://catalog.uncg.edu/academic-regulations-policies/graduate-policies/#sectioniiisummaryofgraduateschoolregulationsforallcertificatesanddegreestext>) of the Graduate Policies (<https://catalog.uncg.edu/academic-regulations-policies/graduate-policies/>) page in the University Catalog. For information about how milestones are accomplished for a specific program, please refer to the doctoral program's handbook.*