

APPLIED ECONOMICS, M.A.

The M.A. in Applied Economics is designed for students who seek careers in business, finance, or government as economists, forecasters, policy analysts, economic researchers, or managers with strong quantitative skills. 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. Excellent training is also provided for students who wish to enter the Ph.D. program at UNC Greensboro or to pursue additional graduate education at other institutions.

Course work for the 30 credit-hour degree combines core knowledge of economic theory and econometrics, specialized applied research methods, advanced electives, and a capstone seminar focused on the development of applied empirical research skills based on the integration of microeconomic theory and econometrics.

Students pursuing the M.A. in Applied Economics may select an optional concentration in Data Analytics. Course work must be approved by the Graduate Program Director and must include certain courses as explained in the discussion of the concentration.

Student Learning Outcomes

- Microeconomic Theory.
 - Students will apply microeconomic theory to the analysis of economics issues.
- Macroeconomic Theory.
 - Students will apply macroeconomic theory to the analysis of economics issues.
- Econometrics.
 - Students will apply econometric procedures in the empirical analysis of economic issues.
- Prepare Data for Economic Analysis.
 - Manage, clean, and use data sets to construct descriptive, graphical, and statistical representations of economic phenomena.
 - Diagnose and identify data issues.

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions (<https://grs.uncg.edu/prospective/guide/>).

Admission to the program requires a completed baccalaureate degree with an earned cumulative GPA of 3.0 or higher OR acceptable scores in the GRE or GMAT standardized tests OR the completion of one or more economics post-baccalaureate certificates awarded from UNC Greensboro.

Degree Program Requirements

Required: 30 credit hours

Code	Title	Credit Hours
Core Knowledge Requirement (12 credits)		
ECO 641/701	Microeconomics I ¹	4
ECO 643/705	Econometric Methods ¹	4
ECO 646/702	Macroeconomics ¹	4
Advanced Theory Requirement (6 credits)		
ECO 625	Data Methods in Economics	3

ECO 631/731	Applied Policy Methods ¹	3
Electives (12 credits)		
Select four courses (12 credits) from the following: ²		12
ECO 630/730	Introduction to Cost Effectiveness	
ECO 637/737	Empirical Health Economics	
ECO 642	Microeconomics II ³	
ECO 644	Econometric Theory ³	
ECO 657	Managerial Economics	
ECO 663	Predictive Data Mining	
ECO 664	Time Series and Forecasting	
ECO 691	Economics Internship	
ECO 741	Advanced Mathematical Economics ³	
ECO 745	Advanced Econometric Theory ³	

Capstone Experience Requirement

Complete an e-Portfolio of significant assignments and final projects

Total Credit Hours 30

¹ ECO 701, ECO 702, ECO 705, and ECO 731 are reserved for students admitted to the M.A. Doctoral Track (M.A./Ph.D.). Registration in these courses must be approved by the Director of Graduate Studies.

² Electives may be earned with 600- or 700-level economics courses or with graduate courses taken outside the department. Electives not listed above must be approved by the Director of Graduate Studies.

³ Electives acceptable for the M.A. Doctoral Track. Doctoral Track elective courses are reserved for students admitted to the M.A. Doctoral Track (M.A./Ph.D.). Registration in these courses must be approved by the Director of Graduate Studies.

e-Portfolio

As a requirement for graduation, each student must successfully complete an e-Portfolio of significant assignments and final projects. The e-Portfolio demonstrates a student's cumulative program knowledge and fulfills the capstone requirement of the program. This body of work can be shared with prospective employers to help students distinguish themselves in the job market. Students must receive approval of their e-Portfolio from the Director of Graduate Studies in order to meet the graduation requirement.

A student may apply course work from a certificate program toward a graduate degree at UNC Greensboro with the approval of the department offering the degree and The Graduate School.

Data Analytics Concentration

The Data Analytics concentration combines the M.A. core knowledge and advanced theory with courses emphasizing the combination of skills, technologies, applications, and processes used by organizations to perform advanced data analysis. The concentration is chosen in consultation with the Graduate Program Director.

Required: 30 credit hours

Code	Title	Credit Hours
Core Knowledge Requirement (18 credits)		
ECO 625	Data Methods in Economics	3
ECO 631/731	Applied Policy Methods	3
ECO 641/701	Microeconomics I	4
ECO 643/705	Econometric Methods	4

ECO 646/702	Macroeconomics	4
Concentration Requirements (9 credits)		
ECO 644	Econometric Theory	3
ECO 663	Predictive Data Mining	3
ECO 664	Time Series and Forecasting	3
Elective (3 credits)		
Choose one course (3 credits) from the following:		3
ECO 630/730	Introduction to Cost Effectiveness	
ECO 637/737	Empirical Health Economics	
ECO 642	Microeconomics II	
ECO 691	Economics Internship	
ECO 741	Advanced Mathematical Economics	
ECO 745	Advanced Econometric Theory	
MBA 703	Managerial Economics	
Capstone Experience Requirement		
Complete an e-Portfolio of significant assignments and final projects		
Total Credit Hours		30

e-Portfolio

As a requirement for graduation, each student must successfully complete an e-Portfolio of significant assignments and final projects. The e-Portfolio demonstrates a student's cumulative program knowledge and fulfills the capstone requirement of the program. This body of work can be shared with prospective employers to help students distinguish themselves in the job market. Students must receive approval of their e-Portfolio from the Graduate Program Director in order to meet the graduation requirement.

Accelerated B.A. or B.S. to M.A. in Applied Economics

Application and Admission

Qualified UNC Greensboro undergraduate students may apply for admission to the Accelerated Master's Program (AMP) and the M.A. in Applied Economics program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 credits earned at UNC Greensboro is required.

Applicants must have completed at least 60 credits and may not apply for admission to the AMP before the first semester of the junior year. All applicants must submit the Accelerated Bachelor's to Graduate Degree Program Petition to the Graduate School and must simultaneously apply for admission to the M.A. in Applied Economics (form is located within the online application to the M.A. in Applied Economics program).

Courses

Admitted students may apply 12 credits of graduate-level course work toward completion of both the undergraduate and graduate degree, provided that they earn a grade of B (3.0) or better in the course and fulfill graduate-level requirements. The graduate courses the student will take within the Accelerated Master's Program must be approved by the Graduate Program Director, must be specified on the Graduate Degree Program Petition, and must be chosen from among the following required courses in the M.A. in Applied Economics curriculum:

Code	Title	Credit Hours
ECO 625	Data Methods in Economics	3
Select three courses (9 credits) from the following:		9

ECO 631/731	Applied Policy Methods	
ECO 630/730	Introduction to Cost Effectiveness	
ECO 637/737	Empirical Health Economics	
ECO 663	Predictive Data Mining	
ECO 664	Time Series and Forecasting	
ECO 691	Economics Internship	
MBA 703	Managerial Economics	

Graduate courses counted for the Accelerated Master's Program should be selected in consultation with the Graduate Program Director. Please consult with an undergraduate adviser to determine how the courses taken at the graduate level will meet requirements in the bachelor's degree program. All degree requirements for the M.A. in Applied Economics remain the same.

M.A. in Applied Economics Doctoral Track Overview

The M.A. in Applied Economics Doctoral Track is offered to superior applicants who have completed a baccalaureate degree and who 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. The Doctoral Track 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 Doctoral Track requires 69 credit hours to complete and results in students earning both an M.A. and a Ph.D.

Application and Admission

Admission to the program requires a completed baccalaureate degree and completion of undergraduate courses in Intermediate Microeconomics (ECO 301 Intermediate Microeconomic Theory at UNC Greensboro), Intermediate Macroeconomics (ECO 302 Intermediate Macroeconomic Theory at UNC Greensboro), Mathematical Economics (ECO 319 Quantitative Analysis at UNC Greensboro), and Economics and Business Statistics II (ECO 350 Economic and Business Statistics II at UNC Greensboro). Equivalent course work in mathematics and statistics may substitute for the latter two.

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions (<https://grs.uncg.edu/prospective/guide/>).

Degree Program Requirements

Required: 69 credit hours

Code	Title	Credit Hours
Master's Doctoral Track Core Knowledge Requirement (18 credits)		
ECO 625	Data Methods in Economics	3
ECO 701/641	Microeconomics I	4
ECO 702/646	Macroeconomics	4
ECO 705/643	Econometrics Methods	4
ECO 731/631	Applied Policy Methods	3

Master's Doctoral Track Electives (12 credits) *

ECO 642	Microeconomics II	3
ECO 644	Econometric Theory	3
ECO 741	Advanced Mathematical Economics	3
ECO 745	Advanced Econometric Theory	3

Master's Doctoral Track Capstone Experience Requirement

Complete an e-Portfolio of significant assignments and final projects

Doctoral Advanced Theory Requirement (6 credits)

ECO 742	Advanced Microeconomic Theory	3
ECO 746	Advanced Econometric Theory II	3

Doctoral Empirical Field Courses (9 credits)

Choose at least three courses (9 credits) from the following: 9

ECO 730	Introduction to Cost Effectiveness	
ECO 734	Public Policies Toward Innovation	
ECO 735	Labor Economics	
ECO 736	Public Economics	
ECO 737	Empirical Health Economics	
ECO 738	Topics in Economics	
ECO 739	Independent Field Course	

Supervised Independent Field Research (12 credits)

ECO 797	Seminar in Empirical Economics	6
ECO 798	Seminar in Economic Research	6

Dissertation Research (12 credits)

ECO 799	Dissertation	12
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Total Credit Hours 69

* Courses may be counted towards both the master's and doctoral program requirements.

e-Portfolio

As a requirement for graduation, each student must successfully complete an e-Portfolio of significant assignments and final projects. The e-Portfolio demonstrates a student's cumulative program knowledge and fulfills the capstone requirement of the master's program. This body of work can be shared with prospective employers to help students distinguish themselves in the job market. Students must receive approval of their e-Portfolio from the Graduate Program Director in order to meet the graduation requirement.

Doctoral Qualifying Examinations

In addition to the course requirements, doctoral students must pass two Ph.D. qualifying examinations. These examinations 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.

Dissertation Research

Work on the dissertation proposal takes place in supervised independent field research courses (ECO 797 Seminar in Empirical Economics and ECO 798 Seminar in Economic Research) under the guidance and supervision of the student's advisory/dissertation committee. 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.

Before registering for dissertation credit (ECO 799 Dissertation), Ph.D. students must be admitted to candidacy by The Graduate School. To make formal application for admission to candidacy, 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 their preliminary written and oral 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.

Ph.D. Required Milestones*

- **Residency (Immersion)** – Doctoral students 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 hours per semester) of graduate coursework (excluding independent study and dissertation hours) on the Greensboro campus after admission to a doctoral program. University requirements aside, a critical aspect of the graduate experience is participation in events beyond the coursework 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 coursework 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 your primary advisor and mentor throughout your 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 you to file a plan of study outlining all the courses you 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 hours 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 & 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 coursework 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 coursework is subject to examination at the time of the preliminary examination.
- **Oral Part of the Comprehensive Examination & 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. In accordance with Graduate School policy. 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 Thesis/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. held at the ASSA Annual Meeting in early January. 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.