

# ECONOMICS MAJOR, B.A.

## Contact Information

### Department of Economics

Visit Program Website (<http://econ.unc.edu>)

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The courses leading to a B.A. degree with a major in economics comprise a large area of inquiry into the problems and structure of the economic segment of society. The curriculum provides the opportunity to achieve one or more of the following objectives:

- General education for intelligent citizenship with special emphasis on understanding the principles and problems of modern economic life
- Preparation for private employment. In pursuing this objective, supplementary courses in business administration (especially accounting courses) may be selected and integrated with the student's program.
- Preparation for government employment
- Preparation for graduate programs in economics, business administration, international studies, law, health and hospital administration, city planning, public policy, and other fields
- Specialized undergraduate programs incorporating double majors and interdisciplinary studies

## Department Programs

### Major

- Economics Major, B.A. (p. 1)
- Economics Major, B.S. (<http://catalog.unc.edu/undergraduate/programs-study/economics-major-bs/>)

### Minor

- Entrepreneurship Minor (<http://catalog.unc.edu/undergraduate/programs-study/entrepreneurship-minor/>)

### Graduate Programs

- M.S. in Economics (<http://catalog.unc.edu/graduate/schools-departments/economics/>)
- Ph.D. in Economics (<http://catalog.unc.edu/graduate/schools-departments/economics/>)

## Student Learning Outcomes

Upon completion of the economics program, students should be able to:

- Define common economic concepts
- Apply these concepts to understand and analyze observed economic phenomena

- Demonstrate the ability to use empirical and econometric methods in economic analysis
- Evaluate the impact of economic phenomena on welfare and standard of living

## Requirements

In addition to the program requirements, students must

- attain a final cumulative GPA of at least 2.0
- complete a minimum of 45 academic credit hours earned from UNC–Chapel Hill courses
- take at least half of their major course requirements (courses and credit hours) at UNC–Chapel Hill
- earn a minimum of 18 hours of C or better in the major core requirements (some majors require 21 hours).

For more information, please consult the degree requirements section of the catalog (<http://catalog.unc.edu/undergraduate/general-education-curriculum-degree-requirements/#degreerequirementstext>).

Code	Title	Hours
<b>Gateway Course</b>		
ECON 101	Introduction to Economics (with a grade of C or better) <sup>H</sup>	4
<b>Core Requirements</b>		
ECON 400	Introduction to Statistics and Econometrics (with a grade of C or better) <sup>H</sup>	3
ECON 410	Intermediate Theory: Price and Distribution (with a grade of C or better) <sup>H</sup>	4
ECON 420	Intermediate Theory: Money, Income, and Employment <sup>H</sup>	3
Four ECON courses at the 400, 500, or 600 level, with at least one course numbered ECON 500 or higher. <sup>1,3</sup>		12
<b>Additional Requirements</b>		
STOR 155	Introduction to Data Models and Inference (prerequisite for ECON 400)	3
One calculus course chosen from: <sup>2</sup>		3-4
MATH 152	Calculus for Business and Social Sciences	
MATH 231	Calculus of Functions of One Variable I <sup>H</sup>	
STOR 112	Decision Models for Business	
STOR 113	Decision Models for Business and Economics	
<b>Total Hours</b>		<b>32-33</b>

<sup>H</sup> Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

<sup>1</sup> Note that 200- and 300-level courses do not count toward the major. ECON 698 will count for 400-level credit only if ECON 384 has been taken; ECON 698 alone will not count toward the major in economics.

<sup>2</sup> The calculus course is a prerequisite for both ECON 400 and ECON 410, and ECON 400 and ECON 410 are both prerequisites for economics courses numbered above 420.

<sup>3</sup> Students may not receive credit for both ECON 470 and ECON 570.

A grade of C or better must be attained in at least six of the seven major courses numbered above ECON 101. For majors in the department's honors program, the minimum is eight economics courses rather than

seven courses in addition to ECON 101. The same provisions apply, except that ECON 691H and ECON 692H must constitute two of the eight courses.

Note: STOR 113 is recommended for most economics majors. MATH 231 is recommended for students who plan to take the calculus sequence (MATH 231, MATH 232, and MATH 233). MATH 116 is not acceptable.

An economics major may apply as many as 15 economics courses, or 45 hours, toward the B.A. degree. ECON 101 will satisfy the social and behavioral sciences Approaches requirement, and the calculus course will satisfy the quantitative reasoning Foundations requirement. Both ECON 400 and ECON 570 satisfy the quantitative intensive Connections requirement. The Experiential Education requirement can be fulfilled by taking any one of the following 500-level electives: ECON 510, ECON 525, ECON 545, ECON 550, ECON 551, ECON 560, or ECON 570.

Economics (ECON) course descriptions (<http://catalog.unc.edu/undergraduate/departments/economics/#coursestext>).

## Sample Plan of Study

Sample plans can be used as a guide to identify the courses required to complete the major and other requirements needed for degree completion within the expected eight semesters. The actual degree plan may differ depending on the course of study selected (second major, minor, etc.). Students should meet with their academic advisor to create a degree plan that is specific and unique to their interests. The sample plans represented in this catalog are intended for first-year students entering UNC–Chapel Hill in the fall term. Some courses may not be offered every term.

## Sample Plan 1

First Year	Hours
MATH 231 or STOR 113 or MATH 152	4
STOR 155	3
ECON 101	4
Hours	11
<b>Sophomore Year</b>	
ECON 400	3
ECON 410	4
ECON 420	3
Hours	10
<b>Junior Year</b>	
ECON 4--	6
Hours	6
<b>Senior Year</b>	
ECON 4--	3
ECON 5--	3
Hours	6
Total Hours	33

H Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

## Sample Plan 2 (Honors Thesis Track)

First Year	Hours
MATH 231 or STOR 113 or MATH 152	4
STOR 155	3
ECON 101	4
Hours	11
<b>Sophomore Year</b>	
ECON 400	3
ECON 410	4
ECON 420	3
Hours	10
<b>Junior Year</b>	
ECON 4--	6
ECON 470	3
Hours	9
<b>Senior Year</b>	
ECON 691H	3
ECON 692H	3
Hours	6
Total Hours	36

H Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

## Sample Plan 3 (Quantitative Track)

The quantitative track highlights research skills of value to students considering careers involving data analysis. It also provides some background valuable in pursuing advanced degrees. (Students contemplating applying to doctoral programs should discuss with the department's director of graduate studies the advanced mathematics courses expected by such programs.)

Code	Title	Hours
<b>First and Second Year</b>		
MATH 231 or STOR 113 or MATH 152	Calculus of Functions of One Variable I <sup>H</sup> Decision Models for Business and Economics Calculus for Business and Social Sciences	4
STOR 155	Introduction to Data Models and Inference	3
ECON 101	Introduction to Economics <sup>H</sup>	4
ECON 400	Introduction to Statistics and Econometrics <sup>H</sup>	3
ECON 410	Intermediate Theory: Price and Distribution <sup>H</sup>	4
ECON 420	Intermediate Theory: Money, Income, and Employment <sup>H</sup>	3
<b>Second or Third Year</b>		
ECON 470	Econometrics <sup>H</sup>	3

**Third and Fourth Year**

Select one of the following two options:	3
A 500-level course that builds on the material in ECON 470:	
ECON 551 Economics of Education	
ECON 571 Advanced Econometrics	
ECON 590 Special Topics	
A 500-level course that uses more advanced mathematics:	
ECON 511 Advanced Game Theory in Economics <sup>H</sup>	
Two additional electives among 400- and 500-level ECON courses	6
Total Hours	33

<sup>H</sup> Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

## Special Opportunities in Economics

### National University of Singapore Joint Degree Program

UNC–Chapel Hill undergraduates can spend between two and four semesters at the National University of Singapore (NUS) and receive a joint bachelor of arts degree with a major in economics from both institutions. Qualified UNC–Chapel Hill students will have at least a 3.3 grade point average and can apply for the joint degree beginning in the second semester of their first year until the second semester of their junior year. UNC joint-degree students can decide how many semesters (between two and four) and at which point in their undergraduate career they would like to study at NUS, as long as it is after their first year at Carolina.

A minimum of 120 credit hours is required for graduation. They consist of a total of 60 hours in the major (including as many as six to 12 hours of honors work if applicable) and 45 hours of General Education requirements. The remaining 15 hours consist of electives, the Supplemental General Education requirement, and possibly one minor. All General Education and graduation requirements of both UNC–Chapel Hill and NUS must be met. A detailed listing of the requirements for both schools and how to satisfy those requirements is available at the UNC Study Abroad Office.

### Honors in Economics

The Department of Economics honors program offers outstanding economics students the opportunity to work closely with an individual faculty member on a specialized research topic of the student's choice during the senior year. Generally, students with a 3.5 grade point average in economics courses and 3.3 in all University coursework may be invited to participate in this two-course program (ECON 691H and ECON 692H).

In the first semester (ECON 691H), students become familiar with the recent literature on topics of major interest. Each candidate formulates an honors thesis proposal and initiates work on the project. In ECON 692H, the thesis work is conducted under the supervision of a faculty advisor who is a specialist in the general topic area of the research.

Near the end of the second semester (ECON 692H), the student stands for an oral examination on the thesis. Upon successful completion of the program, the student receives the bachelor of arts degree with honors or with highest honors. Students in the honors program are also required to complete at least an eight-course major rather than the minimum seven courses, including ECON 691H and ECON 692H.

## Credential in Quantitative Financial Economics (QFE)

The QFE credential provides students with both the theoretical knowledge of financial markets and the practical experience of financial-market transactions. This combination of classroom study and practical application leads to a more detailed and profound understanding of the economics of financial markets.

The QFE credential also introduces students to the tools and skills necessary to be effective financial-market participants in their post-graduate lives. Students acquire a familiarity with the general workings of the financial market and its connections to the real economy. They also acquire fluency in asset pricing and portfolio allocation, with a special emphasis on the quantitative tools necessary for estimation, testing, and optimization. Students are exposed to advanced quantitative tools such as Matlab, structured data storage, computational clusters, and API's for real-time data extraction.

Code	Title	Hours
<b>To earn the credential a student must complete three courses:</b>		
ECON 425	Financial Economics	3
ECON 493	Practicum in Quantitative Financial Economics	1
ECON 525	Advanced Financial Economics	3
Total Hours		7

## Departmental Involvement

Undergraduates in economics have organized two active clubs, the Carolina Economics Club (CEC) and the Women in Economics (WIE) Club. Seminars, resumé workshop, social activities, case competition and greater interaction among students and with faculty have resulted from the formation of these on-going organizations. All majors are invited to participate in the activities of these organizations. The Fed Challenge Competition conducted by the Board of Governors of the Federal Reserve System is another opportunity for students to engage in. Each year, a team of three to five advanced students undertakes research and data analysis on U.S. monetary policy under faculty supervision to participate in the annual competition. In addition, the local chapter of Omicron Delta Epsilon, the national economics honor society, annually extends membership to those outstanding junior and senior economics majors who have demonstrated strong academic performance both overall and in their economics courses.

## Summer Research Opportunities

**The Herbert Brown Mayo Fund for Summer Research:** This is a fund created by a gift from Herbert Brown Mayo, a long-time friend of Carolina Economics. The fund supports undergraduate student research in the areas of financial economics and financial markets.

**The Guest Family Fund for Excellence in Economics:** Matthew, an alumni of Carolina Economics, and Paige Guest, established the fund in 2012, in memory of Matt's father. The fund is designated to support experiential learning opportunities for undergraduate students. Examples of the potential uses of these funds will be summer research fellowships and internships for economics majors, undergraduate faculty-mentored research, research expenses associated with writing honors theses, and travel assistance for research, competitions or academic conferences.

**The Minority Research Fund:** This fund supports undergraduate students from underrepresented groups in economics to do summer research.

## **Study Abroad Opportunities**

There are two study abroad opportunities offered through the economics department: Exploring Economies in Scandinavia and UNC Economics in Croatia. Exploring Economies in Scandinavia exposes students to economic concepts by exploring and experiencing Stockholm's history and culture through an economic lens. This course complements study in political science, business, sociology, women's and gender studies, health policy and management, public policy, etc. UNC Economics in Croatia is a six-week experience where students are immersed in the life and culture of Split, Croatia. Students take two courses at the University of Split and visit a number of surrounding areas, including the Istrian Peninsula, the birthplace of sports tourism in Croatia.

## **Adventures in Economics**

Andrew Pike, a UNC graduate with a degree in economics, created this fund to encourage students to explore application of the economics curriculum through life experience. Adventures could include attending a conference on economic topics, making a trip to interview someone you have learned about in an economics course, do research at the Library of Congress, or any other experience related to economics.

## **EconAid Center**

The EconAid Center provides free, drop-in tutoring with undergraduate peer tutors, for students in the core economics courses (101, 400, 410, and 420) as well as select upper-division economics courses. It is also a space for professors, TAs, and ULAs to hold office hours and help sessions as well as a general study space for economics students.

## **Undergraduate Awards**

Each spring the Chancellor awards the Undergraduate Prize in Economics to the undergraduate student majoring in economics who has been judged the most outstanding on the basis of major and related course performances.