ECONOMICS MAJOR, B.A.

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

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

- earn a minimum final cumulative GPA of 2.000
- complete a minimum of 45 academic credit hours earned from UNC–Chapel Hill courses
- take at least half of their major core requirements (courses and credit hours) at UNC–Chapel Hill
- earn a minimum cumulative GPA of 2.000 in the major core requirements. Some programs may require higher standards for major or specific courses.

For more information, please consult the degree requirements section of the catalog (http://catalog.unc.edu/undergraduate/degree-requirements/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics (with a grade of C or better)</td>
<td>4</td>
</tr>
<tr>
<td>ECON 400</td>
<td>Introduction to Data Science and Econometrics (with a grade of C or better)</td>
<td>4</td>
</tr>
<tr>
<td>ECON 410</td>
<td>Intermediate Microeconomics (with a grade of C or better)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus for Business and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus of Functions of One Variable I H,F</td>
<td>4</td>
</tr>
<tr>
<td>STOR 113</td>
<td>Decision Models for Business and Economics</td>
<td>4</td>
</tr>
</tbody>
</table>

ECON 420 Intermediate Macroeconomics H 3

Four ECON courses at the 400, 500, or 600 level, with at least one course numbered ECON 500 or higher.

Additional Requirements

One calculus course chosen from:

- MATH 152 Calculus for Business and Social Sciences F
- MATH 231 Calculus of Functions of One Variable I H,F
- STOR 113 Decision Models for Business and Economics

Total Hours 30-31

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

F FY-Launch class sections may be available. A FY-Launch section fulfills the same requirements as a standard section of that course, but also fulfills the FY-SEMINAR/FY-LAUNCH First-Year Foundations requirement. Students can search for FY-Launch sections in ConnectCarolina using the FY-LAUNCH attribute.

Note:

1. 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.
2. 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.
3. Students may not receive credit for both ECON 470 and ECON 570.

An economics major may apply as many as 15 economics courses, or 45 hours, toward the B.A. degree.

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

<table>
<thead>
<tr>
<th>First-Year Foundation Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDST 101 College Thriving</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 105 English Composition and Rhetoric</td>
<td>3</td>
</tr>
</tbody>
</table>

or ENGL 105I

or ENGL 105I (Interdisciplinary)
### Sample Plan 2 (Honors Thesis Track)

**First-Year Foundation Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDST 101</td>
<td>College Thriving</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>English Composition and Rhetoric</td>
</tr>
<tr>
<td>or ENGL 105I</td>
<td>or English Composition and Rhetoric (Interdisciplinary)</td>
</tr>
</tbody>
</table>

First-Year Seminar or First-Year Launch (http://catalog.unc.edu/undergraduate/ideas-in-action/first-year-seminars-launches/)  
Triple-I and Data Literacy (http://catalog.unc.edu/undergraduate/ideas-in-action/triple-i/)  
Global Language through level 3 (http://catalog.unc.edu/undergraduate/ideas-in-action/global-language/)  

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 231 or STOR 113 or MATH 152</td>
<td>Calculus of Functions of One Variable</td>
</tr>
<tr>
<td>or Decision Models for Business and Economics</td>
<td>or Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>or Decision Models for Business and Economics</td>
<td>or Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
</tr>
</tbody>
</table>

**Hours** 19

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 400</td>
<td>Introduction to Data Science and Econometrics</td>
</tr>
<tr>
<td>ECON 410</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON 420</td>
<td>Intermediate Macroeconomics</td>
</tr>
</tbody>
</table>

**Hours** 11

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 4–</td>
<td>Two 400-level ECON electives</td>
</tr>
</tbody>
</table>

**Hours** 6

**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 4–</td>
<td>One 400-level ECON elective</td>
</tr>
<tr>
<td>or ECON 5–</td>
<td>One 500-level ECON elective</td>
</tr>
</tbody>
</table>

**Hours** 6

**Total Hours** 42

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

**FY-Launch class sections may be available. A FY-Launch section fulfills the same requirements as a standard section of that course, but also fulfills the FY-SEMINAR/FY-LAUNCH First-Year Foundations requirement. Students can search for FY-Launch sections in ConnectCarolina using the FY-LAUNCH attribute.**

### 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.

The DATA (Data-Acumen-Theory-Application) Science Credential in Economics
The DATA Science Credential in Economics provides experience in combining data skills with foundational knowledge of economics to frame and solve economic questions using real data from finance, industry, government, health, and environment, among others.

Students will be introduced to programming languages (e.g., R/Python) commonly used in applications of data science, and practical data skills: collecting, scraping, cleaning, merging, processing, and visualizing data, descriptive analysis, optimization, and supervised/unsupervised statistical learning.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 390</td>
<td>Special Topics (Economic Applications of Data Science)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 470</td>
<td>Econometrics H</td>
<td>3</td>
</tr>
<tr>
<td>ECON 573</td>
<td>Machine Learning and Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 575</td>
<td>Applied Time Series Analysis and Forecasting</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 9

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

Seminars
Attendance at seminars of invited speakers from industry (~3 per semester) to learn about practice of data science, and to provide opportunities for career networking.

Credential in Quantitative Financial Economics (QFE)
(This program WILL NOT be offered in 2022–2023)

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 postgraduate 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 425</td>
<td>Financial Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 493</td>
<td>Practicum in Quantitative Financial Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 525</td>
<td>Advanced Financial Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 7

Departmental Involvement
Clubs
Undergraduates in economics have organized two active clubs, the Carolina Economics Club (CEC) and the Women in Economics (WIE) Club. Seminars, resume workshop, social activities, case competition, and greater interaction among students and with faculty have resulted from the formation of these ongoing organizations. All majors are invited to participate in the activities of these organizations.

Competitions
The Fed Challenge Competition conducted by the Board of Governors of the Federal Reserve System is an opportunity for students to participate in a competition where they can apply their skills from courses in the economics major. 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.

The Federal Deposit Insurance Corporation (FDIC) Challenge is a faculty supervised opportunity for students to use their data analysis and research skills to analyze data on financial institutions and economic variables and present the results in the annual competition.

Honor Society
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
Funded faculty-led research opportunities are available through the following grants:

- The Guest Family Fund for Excellence in Economics
- Ryan Wesslen Fund
- Mayo Grant for Research in Financial Economics
- The Minority Research Fund
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.

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/)

Contact Information
Department of Economics
Visit Program Website (http://econ.unc.edu)
107 Gardner Hall, CB# 3305
(919) 966-2383