The Geography Major requires four courses from a selection of 15 and requires a minimum of 27 credit hours in geography above the 100 level. Students may elect a general geography major or they may complete additional courses for a concentration in Urban Planning, Earth Science/Environmental Studies, or Geographic Information Science. Students may also complete a major in Geography with Social Studies High School Teaching Licensure.

Student Learning Goals
Students completing this major are expected to demonstrate a basic competence in earth science, human geography, and regional geography. In addition, they are expected to be able to successfully investigate geographic problems using the current research techniques and methodologies of the discipline and to clearly and effectively express their findings in both written and oral form.

Overall Requirements
- 122 credit hours, to include at least 36 credits at or above the 300 course level
- A minimum of 27 credits in geography above the 100 level. Only grades of C- or higher will count toward completion of the major and concentrations.

Degree Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Geographic Techniques</td>
<td>12</td>
</tr>
<tr>
<td>GEO 121</td>
<td>Introduction to Geographic Information Science</td>
<td></td>
</tr>
<tr>
<td>GEO 322</td>
<td>Research Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>GEO 357</td>
<td>Principles of Cartography</td>
<td></td>
</tr>
<tr>
<td>GEO 358</td>
<td>Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>GEO 359</td>
<td>Remote Sensing of Environment</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Introduction to Earth Science</td>
<td></td>
</tr>
<tr>
<td>GEO 106</td>
<td>Geosystems Science</td>
<td></td>
</tr>
<tr>
<td>GEO 106L</td>
<td>Geosystems Science Laboratory</td>
<td></td>
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<tr>
<td>105</td>
<td>Introduction to Human Geography</td>
<td></td>
</tr>
<tr>
<td>GEO 301</td>
<td>Urban Geography: Global Patterns</td>
<td></td>
</tr>
<tr>
<td>GEO 302</td>
<td>Urban Geography: Land Use</td>
<td></td>
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<tr>
<td>GEO 303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 304</td>
<td>Introduction to Transportation Analysis</td>
<td></td>
</tr>
<tr>
<td>GEO 306</td>
<td>World Economic Geography</td>
<td></td>
</tr>
<tr>
<td>GEO 315</td>
<td>The Geography of World Affairs</td>
<td></td>
</tr>
<tr>
<td>GEO 313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 333</td>
<td>Geography of Europe</td>
<td></td>
</tr>
<tr>
<td>GEO 340</td>
<td>Geography of East Asia</td>
<td></td>
</tr>
<tr>
<td>GEO 344</td>
<td>Geography of the United States and Canada</td>
<td></td>
</tr>
<tr>
<td>GEO 491</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 560</td>
<td>Seminar in Regional Geography</td>
<td></td>
</tr>
</tbody>
</table>

Earth Science/Environmental Studies Concentration
A central theme of geography is human interaction with the earth’s physical environment. This concentration permits students to apply the basic scientific principles of physical geography, cartography, and natural resource analysis to the problem of ensuring a high quality of life through maintenance of the natural processes that support human existence. This concentration also provides training to enhance the employment opportunities of students with a strong interest in environmental assessment and resource evaluation.

Geographic Information Science Concentration
Students with this concentration will develop skills in using maps, geospatial computer programs, and remotely sensed images to answer geographic questions relevant to land use planning, urban development, geomorphic or biogeographic processes, or environmental impact assessment. A capstone course (GEO 421 Geographic Information Science), which includes a faculty-directed major project, is completed in the final semester.

Urban Planning Concentration
The inter-regional shift of people and jobs in the United States and elsewhere over the past decades coupled with the movement away from large central cities has increased the need for formal urban and regional planning. Planners are needed in the private sector as well as in state and local governments to provide the appropriate kinds of economic and community development that will ensure a high quality of life in both developed and developing countries. In a growth region like the Southeast, geographers with a planning background are in increasing demand.

Counts toward GEC GNS requirement.
Earth Science/Environmental Studies Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

Additional Concentration Requirements 23

**Required**
- GEO 311 Weather and Climate
- GEO 311L Climatology Laboratory
- GEO 314 Physical Geography: Landscape Processes
- GEO 314L Physical Geography Laboratory

**Select a minimum of five courses of the following:**
- GEO 205 Environmental Change: Its Nature and Impact
- GEO 305 Environmental Hazards Assessment
- GEO 312
- GEO 330 Elements of Hydrology
- GEO 357 Principles of Cartography
- GEO 358 Geographic Information Systems
- GEO 359 Remote Sensing of Environment
- GEO 510 Biogeography
- GEO 511 Advanced Weather and Climate-Synoptic Climatology
- GEO 557 Advanced Cartography
- GEO 559 Advanced Remote Sensing-Imaging
- GEO 570 Applied Physical Geography

† Counts toward GEC GNS requirement.

Geographic Information Science Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

Additional Concentration Requirements 15

**Required**
- GEO 121 Introduction to Geographic Information Science
- GEO 357 Principles of Cartography
- GEO 358 Geographic Information Systems
- GEO 359 Remote Sensing of Environment

**Select a minimum of one of the following:**
- GEO 557 Advanced Cartography
- GEO 559 Advanced Remote Sensing-Imaging
- GEO 421 Geographic Information Science *

* Taken after the completion of the other Additional Concentration Requirements.
† Counts toward GEC GNS requirement.

Urban Planning Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

Additional Concentration Requirements 24

**Required**
- GEO 105 Introduction to Human Geography
- GEO 301 Urban Geography: Global Patterns
- GEO 306 World Economic Geography

Select five of the following:
- GEO 302 Urban Geography: Land Use
- GEO 303
- GEO 304 Introduction to Transportation Analysis
- GEO/S'TH 320
- GEO 322 Research Methods in Geography
- GEO/S'TH 331 Sustainable Tourism and Transportation
- GEO 344 Geography of the United States and Canada
- GEO 357 Principles of Cartography
- GEO/ENT 502 Entrepreneurial Urban Planning
- GEO 522 Geography of Livable Cities
- GEO 533 Regional Economic Development

† Counts toward GEC GNS requirement.

Electives

Electives sufficient to complete the 122 credit hours required for degree.

Geography as a Second Major

• Minimum of 27 credit hours

A student may obtain a second major in geography along with any other major. The student should take 27 credits, including four core courses listed above for the Geography Major. Students considering this option should consult a faculty member in the department.

Geography Major as a Second Academic Concentration for Elementary Education Majors

• Minimum of 18 credit hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

Core Courses 12

Select one of the following:
- GEO 121 Introduction to Geographic Information Science
- GEO 322 Research Methods in Geography
- GEO 357 Principles of Cartography
- GEO 358 Geographic Information Systems
- GEO 359 Remote Sensing of Environment

Select one of the following:
- GEO 103 Introduction to Earth Science
- GEO 106 Geosystems Science & 106L Geosystems Science Laboratory

Select one of the following:
- GEO 105 Introduction to Human Geography
- GEO 301 Urban Geography: Global Patterns
- GEO 302 Urban Geography: Land Use
- GEO 303
- GEO 306 World Economic Geography
- GEO 315 The Geography of World Affairs

Select one of the following:
- GEO 102
- GEO 104 World Regional Geography
GEO 313

GEO 344  Geography of the United States and Canada

Additional Courses  6

Select any two additional GEO courses at the 300 level or higher

Accelerated B.A. to M.A.

Application and Admission

Qualified UNC Greensboro undergraduate students who are pursuing the B.A. in Geography may apply for admission to the Accelerated Degree Program (Applying for Admission). A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNC Greensboro is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take the GRE. All applicants must submit the Request for Accelerated Degree Program to The Graduate School and must simultaneously apply for admission to the graduate degree program.

Admitted students may apply a maximum of 12 credits of graduate-level coursework (each course carries 3 credits) from the following course list toward completion of both the undergraduate and graduate degree, provided they earn a grade of "B" (3.0) or better in each course and fulfill graduate-level requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 502</td>
<td>Entrepreneurial Urban Planning</td>
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</tr>
<tr>
<td>GEO 504</td>
<td>Political Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 510</td>
<td>Biogeography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 511</td>
<td>Advanced Weather and Climate-Synoptic Climatology</td>
<td>3</td>
</tr>
<tr>
<td>GEO 522</td>
<td>Geography of Livable Cities</td>
<td>3</td>
</tr>
<tr>
<td>GEO 557</td>
<td>Advanced Cartography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 559</td>
<td>Advanced Remote Sensing-Imaging</td>
<td>3</td>
</tr>
<tr>
<td>GEO 560</td>
<td>Seminar in Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 570</td>
<td>Applied Physical Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

Degree Program Requirements

Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the B.A. and M.A. degree in Geography remain the same.