### General Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours</td>
<td>124</td>
</tr>
<tr>
<td>Upper-Division Credit Hours</td>
<td>84</td>
</tr>
<tr>
<td>Minimum Retention/Graduation Grade Point Averages:</td>
<td>2.25</td>
</tr>
<tr>
<td>Minimum in O.U. Coursework</td>
<td>2.25</td>
</tr>
<tr>
<td>Minimum in Major Coursework – Combined and O.U.</td>
<td>2.25</td>
</tr>
<tr>
<td>Overall – Combined and O.U.</td>
<td>2.25</td>
</tr>
</tbody>
</table>

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in four years.

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### University-Wide General Education (minimum 40 hours) and College of Atmospheric and Geographic Sciences Requirements

Courses graded P/NP will not apply.

**Core Area I: Symbolic and Oral Communication (9-19 hours, 3-5 courses)**
1. English Composition (6 hours, 2 courses)
   - English 1113, Principles of English Composition
   - English 1213, Principles of English Composition, or EXPO 1213, Expository Writing

**Core Area II: Natural Science (7 hours, 2 courses)** including one laboratory component.
1. Science with Lab: *CHEM 1315, General Chemistry*
2. Science without Lab: *PHYS 2514, General Physics for Engr. & Science Majors*

**Core Area III: Social Science (6 hours, 2 courses)**
1. Political Science 1113, American Federal Government
2. [Course](http://www.ou.edu/content/gened/courses.html)

**Core Area IV: Humanities (12 hours, 4 courses)**
1. a. Understanding Artistic Forms (3 hours, 1 course)
2. b. Western Civilization and Culture (6 hours, 2 courses)
   1. History 1483, U.S., 1492-1865, or History 1493, U.S., 1865-Present
   2. [Course](http://www.ou.edu/content/gened/courses.html) (excluding HIST 1483 and 1493)
3. c. Non-Western Culture (3 hours, 1 course):

**Core Area V: Senior Capstone Experience (3 hours, 1 course):**

At least three hours of Upper-Division General Education coursework must be completed outside the major.

*College of Atmospheric and Geographic Sciences requirements*

### Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:

1. MATH 1914, Differential & Integral Calculus I
2. MATH 2924, Differential & Integral Calculus II
3. PHYS 2524, General Physics for Engr. & Science Majors
4. C S 1313, Programming for Non-Majors, or METR 1313, Programming for Meteorology

MATH 1823, 2423, and 2433 will also fulfill the College's calculus requirement.

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<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science Requirements:</td>
<td>124</td>
</tr>
<tr>
<td>Upper-Division Science Electives (8 hours, 2 courses)</td>
<td>3</td>
</tr>
<tr>
<td>C S 1313, Intro. to Computer Prog.</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2113, Computer-Based Info. Sys.</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3013, Intro. to Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**Statistics (7 hours, 2 courses)**
1. GEOG 3924, Quantitative Methods
2. GIS 4923, Spatial Statistics

**Computer-Related (6 hours, 2 courses)**
1. C S 1323, Intro. to Computer Programming
2. MIS 2113, Computer-Based Info. Sys.
3. MIS 3013, Intro. to Programming

**Upper-Division Science Electives (A minimum of 15 hours of 3000-4000-level courses in botany, chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, microbiology or physics.**
1. Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:

**Free Electives**

Electives to bring total applicable hours to 124 including 40 upper-division hours.
A minimum of two semesters must be spent in residence in the College of Atmospheric and Geographic Sciences.

**FIRST SEMESTER**
- Hours: 16
- Computer-Related (6 hours, 2 courses)

**SECOND SEMESTER**
- Hours: 15
- Total Credit Hours: 36

At least 36 of the last 48 hours must be completed in residence at OU.

**SECOND SEMESTER**
- Hours: 15
- Upper-Division Science Electives

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### Refer to the OU General Catalog for more complete information.

**Suggested Semester Plan of Study — Bachelor of Science in Geographic Information Science (B452)**

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with College of Atmospheric and Geographic Sciences and/or Geoinformatics Program academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Atmospheric & Geographic Sciences, and Geographic Information Science major requirements.

### Bachelor's degrees require a minimum of 48 hours of upper-division (3000-4000) coursework.

This plan of study should not be used in lieu of academic advisement.

<table>
<thead>
<tr>
<th>Year</th>
<th>FIRST SEMESTER</th>
<th>Hours</th>
<th>SECOND SEMESTER</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRESHMAN</td>
<td>ENGL 1113, Principles of English Composition (Core I)</td>
<td>3</td>
<td>ENGL 1213, Principles of English Composition (Core I), or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1315, General Chemistry (Core II)</td>
<td>5</td>
<td>EXPO 1213, Expository Writing (Core I)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>HIST 1483, United States 1492-1865, or</td>
<td>3</td>
<td>MATH 2924, Differential &amp; Integral Calculus II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1493, United States 1865-Present (Core IV)</td>
<td>4</td>
<td>CS 1313, Programming for Non-Majors, or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 1914, Differential &amp; Integral Calculus I (Core I)</td>
<td>4</td>
<td>METR 1313, Programming for Meteorology</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CREDIT HOURS**
- 15

**SOPHOMORE**
- Hours: 16
- TOTAL CREDIT HOURS: 30

| | SOCIAL SCIENCE (Core III) | 3 | Western Civilization & Culture (Core IV) | 3 |
| | Understanding Artistic Forms (Core IV) | 3 | GIS 2023, Intro. to Spatial Thinking | 3 |
| | GIS 2013, Geospatial Technologies & Society | 3 | Cognate Course | 3 |
| | Free Elective | 3 | Free Elective | 3 |

**TOTAL CREDIT HOURS**
- 16

**JUNIOR**
- Hours: 19
- TOTAL CREDIT HOURS: 39

| GEOG 3773, Geography of the U.S. | 3 |
| GIS 3924, Quantitative Methods | 4 |
| GIS 4013, Fundamentals of GIS | 3 |
| Remote-Sensing Course Requirement | 3 |
| Computer-Related Course Requirement | 3 |
| Upper-Division Science elective | 3 |

**TOTAL CREDIT HOURS**
- 19

**SENIOR**
- Hours: 15
- TOTAL CREDIT HOURS: 44

| GIS 4453, Adv. GIS and Spatial Analysis | 3 |
| GIS 4633, Spatial Programming | 3 |
| GIS 4923, Spatial Statistics | 3 |
| GEOG 4893, Research Methods | 3 |
| Upper-Division Science Elective | 3 |

**TOTAL CREDIT HOURS**
- 15

### Statistics (7 hours, 2 courses)
- GEOG 3924, Quantitative Methods
- GIS 4923, Spatial Statistics

### Computer-Related (6 hours, 2 courses)
- CS 1323, Intro. to Computer Programming
- MIS 2113, Computer-Based Info. Systems
- MIS 3013, Intro. to Programming

### Cognate Courses

Twelve hours (12 hours, 4 courses) in the same area, to be chosen from the following: economics, geography, geology, journalism, meteorology, political science, psychology, regional & city planning, sociology, or an adviser-approved area.

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### Upper-Division Science Electives
A minimum of 15 hours of 3000-4000-level courses in botany, chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, microbiology, or physics.