GENERAL REQUIREMENTS

Total Credit Hours: 124
Total Upper-Division Credit Hours: 40
Minimum Retention/Graduation Grade Point Averages:
Minimum in O.U. Coursework: 2.25
Minimum in Major Coursework – Combined and O.U.: 2.25
Overall – Combined and O.U.: 2.25

For Students Entering the Oklahoma State System for Higher Education:
Summer 2015 through Spring 2016

GENERAL EDUCATION AND COLLEGE REQUIREMENTS

Courses graded P/NP will not apply.

Courses for fulfillment of General Education and College of Atmospheric & Geographic Sciences requirements must be from the approved General Education course list at http://www.ou.edu/content/gened/courses.html.

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)
A. English Composition (6 hours, 2 courses)
1. English 1113, Principles of English Composition
2. English 1213, Principles of English Composition, or
EXPO 1213, Expository Writing

B. Foreign Language (0-10 hours in the same language)
Students who have not completed two years of the same foreign language in high school are required to take two college courses in the same foreign language. This additional coursework may add 6-10 hours to the minimum hours required for graduation.
1. Beginning Course (0-5 hours)
2. Beginning Course, continued (0-5 hours)

C. Mathematics (3 hours, 1 course). *MATH 1914, Differential & Integral Calculus I

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. __________________________

Core Area IV: Humanities (12 hours, 4 courses)
A. Understanding Artistic Forms (3 hours, 1 course)
B. Western Civilization and Culture (6 hours, 2 courses)
1. History 1483, U.S., 1492-1865, or History 1493, U.S., 1865-Present,
2. __________________________ (excluding HIST 1483 and 1493)
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.

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

Courses required for the major support may not also fulfill University-Wide General Education Requirements

MAJOR REQUIREMENTS

CORE (27 hours, 9 courses)
GIS 2013, Geospatial Tech. & Society
GIS 2023, Intro. to Spatial Thinking
GEOG 3773, Geography of the U.S.
GIS 4013, Fundamentals of GIS
GIS 4253, GIS Applications
GIS 4453, Adv. GIS and Spatial Analysis
GIS 4653, Spatial Programming
GEOG 4893, Research Methods and Professional Development
GIS 4953, Geoinformatics Capstone Seminar

Remote Sensing (6 hours, 2 courses)
GIS 4133, Fund. of Remote Sensing
GIS 4233, Digital Image Processing
GIS 4393, Automated Analysis of Spatial Grids
GIS 4970, Topics (Remote Sensing)

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

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

Cognate
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 another adviser-approved area.

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.

Free Electives
Electives to bring total applicable hours to 124 including 40 upper-division hours.
A minimum of 126 semester hours acceptable toward graduation must be completed.

UPPER-DIVISION HOURS: A minimum of 40 upper-division semester hours acceptable toward graduation must be completed. OU courses numbered 3000 or above are upper-division. Transfer work is counted as lower-division or upper-division credit depending on the level at which it was offered at the institution where it was earned. Two-year college work is accepted only as lower-division credit.

SENIOR INSTITUTION HOURS: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

RESIDENCY:
- A minimum of two semesters must be spent in residence in the College of Atmospheric and Geographic Sciences.
- At least 36 of the last 48 hours must be completed in residence at OU.

INDIVIDUAL STUDIES: No more than six hours of independent study or directed readings may be applied toward degree requirements.

GRADE POINT AVERAGES: Students must earn a minimum overall 2.25 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU.

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 check sheet 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.

<table>
<thead>
<tr>
<th>Year</th>
<th>FIRST SEMESTER</th>
<th>Hours</th>
<th>SECOND SEMESTER</th>
<th>Hours</th>
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<tr>
<td>FRESHMAN</td>
<td>ENGL 1113, Principles of English Composition (Core I)</td>
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<td>ENGL 1213, Principles of English Composition (Core I), or</td>
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<td>CHEM 1315, General Chemistry (Core II)</td>
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<td>EXPO 1213, Expository Writing (Core I)</td>
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<td>HIST 1483, United States 1492-1865, or</td>
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<td>MATH 2924, Differential &amp; Integral Calculus II</td>
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<td>1493, United States 1865-Present (Core IV)</td>
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<td>CS 1313, Programming for Non-Majors, or</td>
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<td>MATH 1914, Differential &amp; Integral Calculus I (Core I)</td>
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<td>METR 1313, Programming for Meteorology</td>
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<td>GIS 2013, Geospatial Technologies &amp; Society</td>
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<td>PSC 1113, American Federal Government (Core III)</td>
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<td>Cognate Course</td>
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<td><strong>TOTAL CREDIT HOURS</strong></td>
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<td>PHYS 2524, General Physics for Science &amp; Engr. Majors</td>
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<td>Social Science (Core III)</td>
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<td>Western Civilization &amp; Culture (Core IV)</td>
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<td>Understanding Artistic Forms (Core IV)</td>
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<td>GIS 2023, Intro. to Spatial Thinking</td>
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<td>Free Elective</td>
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<td>Free Elective</td>
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<td><strong>TOTAL CREDIT HOURS</strong></td>
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<td>JUNIOR</td>
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<td>GIS 4253, GIS Applications</td>
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<td><strong>TOTAL CREDIT HOURS</strong></td>
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<td>SENIOR</td>
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<td>GIS 4953, Capstone</td>
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<td>GIS 4653, Spatial Programming</td>
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<td>Upper-Division Science Elective</td>
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<td>GIS 4923, Spatial Statistics</td>
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<td>Upper-Division Science Elective</td>
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<td>GEOG 4893, Research Methods</td>
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<td><strong>TOTAL CREDIT HOURS</strong></td>
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</table>

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>Remote-Sensing (6 hours, 2 courses)</th>
<th>Statistics (7 hours, 2 courses)</th>
<th>Computer-Related (6 hours, 2 courses)</th>
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<tr>
<td>GIS 4133, Fund. of Remote Sensing</td>
<td>GEOG 3924, Quantitative Methods</td>
<td>C S 1323, Intro. to Computer Programming</td>
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<td>GIS 4393, Automated Analysis of Spatial Grids</td>
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<td>MIS 3013, Intro. to Programming</td>
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<tr>
<td>GIS 4970, Topics (Remote Sensing)</td>
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</table>

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.

Upper-Division Science Electives

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