

**REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN GEOGRAPHIC INFORMATION SCIENCE**  
**COLLEGE OF ATMOSPHERIC AND GEOGRAPHIC SCIENCES**  
 THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education:  
**Summer 2014 through Spring 2015**

GENERAL REQUIREMENTS	
Total Credit Hours . . . . .	126
Total Upper-Division Credit Hours . . . . .	48
<b>Minimum Retention/Graduation Grade Point Averages:</b>	
Minimum in OU Coursework . . . . .	2.25
Minimum in Major Coursework – Combined and OU . . . . .	2.25
Overall – Combined and OU . . . . .	2.25

Geographic Information Science  
**B452**  
 Bachelor of Science in Geographic Information Science

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in four years.		
GENERAL EDUCATION AND COLLEGE REQUIREMENTS Courses graded P/NP will not apply.	Courses required for the major or major support may <u>not</u> also fulfill University-Wide General Education Requirements	
<p>Courses for fulfillment of General Education and College of Atmospheric &amp; Geographic Sciences requirements must be from the approved General Education course list at <a href="http://www.ou.edu/enrollment/home/classes_offered/general_education.html">http://www.ou.edu/enrollment/home/classes_offered/general_education.html</a>.</p> <p style="text-align: center;"><b>University-Wide General Education (minimum 40 hours) and College of Atmospheric and Geographic Sciences Requirements</b>                      Courses graded P/NP will not apply</p> <p><b>Core Area I: Symbolic and Oral Communication</b> (9-19 hours, 3-5 courses)</p> <p>A. <b>English Composition</b> (6 hours, 2 courses)</p> <ol style="list-style-type: none"> <li>English 1113, Principles of English Composition</li> <li>English 1213, Principles of English Composition, or EXPO 1213, Expository Writing</li> </ol> <p>B. <b>Foreign Language</b> (0-10 hours in the same language)</p> <p>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.</p> <ol style="list-style-type: none"> <li>Beginning Course (0-5 hours) _____</li> <li>Beginning Course, continued (0-5 hours) _____</li> </ol> <p>C. <b>Mathematics</b> (3 hours, 1 course). *MATH 1914, Differential &amp; Integral Calculus I</p> <p><b>Core Area II: Natural Science</b> (7 hours, 2 courses) including one laboratory component.</p> <ol style="list-style-type: none"> <li><b>Science with Lab:</b> *CHEM 1315, General Chemistry</li> <li><b>Science without Lab:</b> *PHYS 2514, General Physics for Engr. &amp; Science Majors</li> </ol> <p><b>Core Area III: Social Science</b> (6 hours, 2 courses)</p> <ol style="list-style-type: none"> <li>Political Science 1113, American Federal Government</li> <li>_____</li> </ol> <p><b>Core Area IV: Humanities</b> (12 hours, 4 courses)</p> <p>a. <b>Understanding Artistic Forms</b> (3 hours, 1 course) _____</p> <p>b. <b>Western Civilization and Culture</b> (6 hours, 2 courses)</p> <ol style="list-style-type: none"> <li>History 1483, U.S., 1492-1865, or History 1493, U.S., 1865-Present,</li> <li>_____ (excluding HIST 1483 and 1493)</li> </ol> <p>c. <b>Non-Western Culture</b> (3 hours, 1 course): _____</p> <p><b>Core Area V: Senior Capstone Experience</b> (3 hours, 1 course): _____</p> <p>At least three hours of Upper-Division General Education coursework must be completed outside the major.</p> <p>*College of Atmospheric and Geographic Sciences requirements</p>	MAJOR REQUIREMENTS	MAJOR SUPPORT REQUIREMENTS
	<p><b>CORE (27 hours, 9 courses)</b></p> <p>GIS 2013, Geospatial Tech. &amp; Society 3                      GIS 2023, Intro. to Spatial Thinking 3                      GEOG 3773, Geography of the U.S. 3                      GIS 4013, Fundamentals of GIS 3                      GIS 4253, GIS Applications 3                      GIS 4453, Adv. GIS and Spatial Analysis 3                      GIS 4653, Spatial Programming 3                      GEOG 4893, Research Methods and Professional Development 3                      GIS 4953, GIS Capstone 3</p> <p><b>Remote Sensing (6 hours, 2 courses)</b></p> <p>GIS 4133, Fund. of Remote Sensing 3                      GIS 4233, Digital Image Processing 3                      GIS 4393, Automated Analysis of Spatial Grids 3                      GIS 4970, Topics (Remote Sensing) 3</p> <p>_____ 3                      _____ 3</p> <p><b>Statistics (7 hours, 2 courses)</b></p> <p>GEOG 3924, Quantitative Methods 4                      GIS 4923, Spatial Statistics 3</p> <p><b>Computer-Related (6 hours, 2 courses)</b></p> <p>C S 1323, Intro. to Computer Prog. 3                      MIS 2113, Computer-Based Info. Sys. 3                      MIS 3013, Intro. to Programming 3</p> <p>_____ 3                      _____ 3</p>	<p><b>Cognate</b></p> <p>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 &amp; city planning, sociology, or another adviser-approved area.</p> <p>_____ 3                      _____ 3                      _____ 3                      _____ 3</p> <p><b>Upper-Division Science Electives</b></p> <p>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.</p> <p>_____ 3                      _____ 3                      _____ 3                      _____ 3</p>
<p style="text-align: center;"><b>Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:</b></p> <ol style="list-style-type: none"> <li>MATH 1914, Differential &amp; Integral Calculus I</li> <li>MATH 2924, Differential &amp; Integral Calculus II</li> <li>PHYS 2524, General Physics for Engr. &amp; Science Majors</li> <li>C S 1313, Programming for Non-Majors</li> <li>METR 1313, Programming for Meteorology</li> </ol> <p>MATH 1823, 2423, and 2433 will also fulfill the College's calculus requirement.</p>	<p style="text-align: center;"><b>Free Electives</b></p> <p>Electives to bring total applicable hours to 126 including 48 upper-division hours.</p>	

