

**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 2018 through Spring 2019**

GENERAL REQUIREMENTS	
Total Credit Hours	150
Total Upper-Division Credit Hours	40
<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  
**A452**  
 Bachelor of Science in Geographic Information Science/Master of Regional & City Planning  
**F817-Q273**

**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 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/content/gened/courses.html">http://www.ou.edu/content/gened/courses.html</a>.</p> <p 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> (9-22 hours, 3-6 courses)                      A. <b>English Composition</b> (6 hours, 2 courses)                      1. English 1113, Principles of English Composition                      2. English 1213, Principles of English Composition, or EXPO 1213, Expository Writing</p> <p>B. <b>Foreign Language</b> (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.                      1. Beginning Course (0-5 hours) _____                      2. Beginning Course, continued (0-5 hours) _____</p> <p>C. <b>Mathematics</b> (3 hours, 1 course). *<b>MATH 1914</b>, Differential &amp; Integral Calculus I</p> <p><b>Core Area II: Natural Science</b> (7 hours, 2 courses) including one laboratory component.                      1. <b>Science with Lab:</b> *<b>CHEM 1315</b>, General Chemistry                      2. <b>Science without Lab:</b> *<b>PHYS 2514</b>, General Physics for Engr. &amp; Science Majors</p> <p><b>Core Area III: Social Science</b> (6 hours, 2 courses)                      1. Political Science 1113, American Federal Government                      2. _____</p> <p><b>Core Area IV: Humanities</b> (12 hours, 4 courses)                      a: <b>Understanding Artistic Forms</b> (3 hours, 1 course) _____                      b. <b>Western Civilization and Culture</b> (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. <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> <p align="center"><b>Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:</b></p> <p><b>Additional College of Atmospheric and Geographic Sciences Bachelor of Science Requirements:</b>                      1. <b>MATH 1914</b>, Differential &amp; Integral Calculus I (carries General Educ. credit)                      2. <b>MATH 2924</b>, Differential &amp; Integral Calculus II                      3. <b>PHYS 2524</b>, General Physics for Engr. &amp; Science Majors                      4. <b>METR 1313</b>, Programming for Meteorology</p> <p>MATH 1823, 2423, and 2433 will also fulfill the College's calculus requirement.</p>	MAJOR REQUIREMENTS	SHARED HOURS
	<p><b>CORE (27 hours, 9 courses)</b>                      GEOG 1113, The Language of Maps 3                      GIS 2023, Intro. to Spatial Thinking 3                      GEOG 3773, Geography of the U.S. 3                      *GIS 5013, 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                      GEOG 4953, Geoinformatics Capstone Seminar 3</p> <p><b>Remote Sensing (6 hours, 2 courses)</b>                      GIS 4133, Fund. of Remote Sensing                      GIS 4233, Digital Image Processing                      GIS 4393, Automated Analysis of Spatial Grids                      GIS 4970, Topics (Remote Sensing)</p> <p>_____                      _____</p> <p><b>Statistics (7 hours, 2 courses)</b>                      GEOG 3924, Quantitative Methods 4                      GIS 4923, Spatial Statistics 3</p> <p><b>Computer-Related (6 hours, 2 courses)</b>                      Two from the following:                      C S 1313, Programming for Non-Majors with C                      MIS 2113, Computer-Based Info. Sys.                      MIS 3013, Intro. to Programming</p> <p>_____                      _____</p>	<p align="center"><b>MAJOR SUPPORT REQUIREMENTS</b></p> <p><b>Additional College Requirements</b></p> <p><b>Upper-Division Science Electives</b>                      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>_____                      _____                      _____                      _____                      _____</p>

## INFORMATION CONCERNING GENERAL RULES, REGULATIONS AND MINIMUM REQUIREMENTS

**TOTAL HOURS:** A minimum of 120 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.

**GRADEPOINT 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/Master of Regional & City Planning: A452/F818-Q23**

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 Department of Geography academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, College of Atmospheric & Geographic Sciences, and Environmental Sustainability major requirements.

Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
<b>FRESHMAN</b>	ENGL 1113, Principles of English Comp. (Core I)	3	ENGL 1213, Principles of English Comp. (Core I), <b>or</b>	3
	HIST 1483, United States 1492-1865, <b>or</b>	3	EXPO 1213, Expository Writing (Core I) Beginning	
	1493, United States 1865-Present (Core IV)		P SC 1113, American Federal Government (Core III)	3
	CHEM 1315, General Chemistry	5	MATH 2924, Differential & Integral Calculus II	4
	MATH 1914, Differential & Integral Calculus I (Core I)	4	GEOG 1113, The Language of Maps	3
			METR 1313, Programming for Meteorology	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>
<b>SOPHO-MORE</b>	GIS 2023, Intro. to Spatial Thinking	3	GEOG 3773, Geography of the U.S.	3
	PHYS 2514, General Physics for Engineering & Science Majors	4	PHYS 2524, General Physics for Engineering & Science Majors	4
	Computer-Related course requirement	3	Computer-Related course requirement	3
	<sup>1</sup> General Education Social Science (Core III)	3	<sup>1</sup> General Education Western Civilization & Culture (Core IV)	3
	<sup>1</sup> General Education Understanding Artistic Forms (Core IV)	3	<sup>1</sup> General Education Non-Western Culture (Core IV)	3
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>
<b>JUNIOR</b>	GEOG 3924, Analytic Methods in Geography	4	GIS 4253, GIS Applications	3
	*GIS 5013, Fundamentals of GIS	3	Remote Sensing course requirement	3
	Remote Sensing course requirement	3	*RCPL 5203, Urban Land Use Controls	3
	<sup>2</sup> Upper Division Science Elective	3	<sup>2</sup> Upper Division Science Elective	3
	<sup>2</sup> Upper Division Science Elective	3	<sup>2</sup> Upper Division Science Elective	3
	<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>
<b>SENIOR</b>	GEOG 4893, Research Methods	3	GEOG 4953, Capstone	3
	GIS 4653, Spatial Programming	3	GIS 4453, Advanced GIS & Spatial Analysis	3
	GIS 4923, Spatial Statistics	3	*RCPL 5173, Urban & Regional Analysis	3
	*RCPL 5013, History & Theory of Urban Planning	3	Breadth course in selected RCPL specialization	3
	RCPL 5113, Urban Planning Research Methods	3		
<sup>2</sup> Upper Division Science Elective	3			
	<b>TOTAL CREDIT HOURS</b>	<b>18</b>	<b>TOTAL CREDIT HOURS</b>	<b>12</b>
<b>5th YEAR</b>	RCPL 5525 Comprehensive RCPL Project Studio <b>or</b> RCPL 5523 {Fa}/5522{Sp}	3-5	*RCPL 5053, Planning Management	3
	Breadth course in selected RCPL specialization	3	Breadth course in selected RCPL specialization	3
	Breadth course in non-selected specialization	3	RCPL specialization elective	3
	RCPL specialization elective	3	RCPL specialization elective	3
			(RCPL 5522, if not in Fall)	0-2
	<b>TOTAL CREDIT HOURS</b>	<b>12-14</b>	<b>TOTAL CREDIT HOURS</b>	<b>12-14</b>

\*= These courses are shared between the undergraduate and graduate degrees.

<sup>1</sup>= To be chosen from the University-Wide General Education Approved Course List. Three hours of general education must be upper-division outside the major.

<sup>2</sup>= A minimum of 15 hours of 3000-4000-level courses to be chosen from botany, chemistry, computer science, engineering, geology, geophysics, mathematics, management information systems, meteorology, microbiology or physics.

**Bachelor's degrees require a minimum of 40 hours of upper-division (3000-4000) coursework.** This plan of study should not be used in lieu of academic advisement.