GEOSPATIAL INFORMATION SCIENCE, BS

Requirements for Students Matriculating in or before Academic Year 2017-2018. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 120

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td></td>
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<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
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</tbody>
</table>

American History & Government

HIST 1103 | Survey of American History | 3 |
| POLS 1113 | American Government | 3 |

Analytical & Quantitative Thought (A)

MATH 2144 | Calculus I (A) | 4 |

Humanities (H)

Courses designated (H) | 6 |

Natural Sciences (N)

Must include one Laboratory Science (L) course

GEOG 1114 | Physical Geography (LN) | 4 |

2 hours designated (N) | 2 |

Social & Behavioral Sciences (S)

Course designated (S) | 3 |

Additional General Education

Courses designated (A), (H), (N), or (S) | 9 |

Hours Subtotal | 40 |

Diversity (D) & International Dimension (I)

May be completed in any part of the degree plan

Select at least one Diversity (D) course

Select at least one International Dimension (I) course

College/Departmental Requirements

First Year Seminar

A&S 1111 | A&S First Year Seminar (transfer students with 15 hours exempt) | 1 |

Arts & Humanities

See note 2.a.

Natural & Mathematical Sciences

MATH 2153 | Calculus II (A) | 3 |
| CS 1113 | Computer Science I (A) | 3 |

Select 3 additional hours | 3 |

See note 2.b.

Foreign Language

See note 3

Upper-Division General Education

Select 6 hours outside major department

See note 2.c.

Hours Subtotal | 13 |

Major Requirements

Minimum GPA 2.50. Minimum GPA in all GEOG courses 2.0.

Core courses

GEOG 2344 | Digital Tools for Environmental Exploration (LN) | 4 |
| GEOG 3333 | Spatial Analysis (A) | 3 |
| GEOG 4203 | Fundamentals of Geographic Information Systems | 3 |
| GEOG 4323 | Computer Cartography | 3 |
| GEOG 4333 | Remote Sensing | 3 |
| GEOG 4343 | Geographic Information Systems: Resource Management Applications | 3 |
| GEOG 4353 | Geographic Information Systems: Socioeconomic Applications | 3 |
| GEOG 4943 | Geospatial Information Science Internship/Research Capstone | 3 |
| CS 2133 | Computer Science II | 3 |
| CS 2433 | C/C++ Programming | 3 |

Select one of the following: | 3 |

| STAT 2013 | Elementary Statistics (A) | |
| STAT 2023 | Elementary Statistics for Business and Economics (A) | |
| STAT 2053 | Elementary Statistics for the Social Sciences (A) | |

Select 6 hours upper-division GEOG courses | 6 |

Select 6 hours upper-division (non-GEOG) departmental approved related courses | 6 |

Hours Subtotal | 46 |

Electives

Select 21 hours | 21 |

May need to include 6 hours of a foreign language (see note 3)

May need to include 6 hours upper-division general education outside major department (see note 2.c.) and 7 additional upper-division hours

Hours Subtotal | 21 |

Total Hours | 120 |

1 College and Departmental Requirements that may be used to meet Gen Ed Requirements.

Other Requirements

- See the College of Arts and Sciences Requirements.
- Upper-Division Credit: Total hours must include at least 40 hours in courses numbered 3000 or above.
- Hours in One Department: Hours in one department in excess of 54 will be added to the minimum total of 120 required for graduation.
## College of Arts and Sciences Requirements

### 1. General Education Requirements

No more than two courses (or eight hours) from the major department may be used to meet General Education and College and Departmental Requirements. The General Education required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

### 2. A&S College/Departmental Requirements

- **a.** Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (A), PHIL 3003 Symbolic Logic (A) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.

- **b.** Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOL, BIOE, BOT, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.

- **c.** The required six hours of upper-division General Education may not include courses from the student's major department. This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).

- **d.** Non-Western Studies Requirement for B.A. and B.F.A.; One 3-hour course in Non-Western Studies from:

<table>
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<tr>
<th>Code</th>
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<tr>
<td>AMIS 2013</td>
<td>Introduction to American Indian Studies (D)</td>
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<td>AMIS 4013</td>
<td>American Indian Sovereignty (D)</td>
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<td>ANTH 3443</td>
<td>Peoples of Mesoamerica (IS)</td>
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<td>ANTH 4223</td>
<td>The Aztec Empire (H)</td>
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<td>ART 3693</td>
<td>Survey of Asian Art (H)</td>
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<td>ART 3733</td>
<td>History of Latin American Art I</td>
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<td>ART 4603</td>
<td>History of Ancient Egyptian Art</td>
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<td>ART 4653</td>
<td>History of Indian Art</td>
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<tr>
<td>ART 4663</td>
<td>History of Chinese Art (H)</td>
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<td>ART 4673</td>
<td>History of Japanese Art</td>
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<td>ART 4683</td>
<td>Modern and Contemporary Art in Asia</td>
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<td>ART 4703</td>
<td>Art East and West: Biases and Borrowings</td>
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<td>ART 4713</td>
<td>The Visual Culture of the Islamic World (Hi)</td>
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<td>ART 4763</td>
<td>Native American Art and Material Culture</td>
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<td>CHIN 1813</td>
<td>Elementary Chinese II</td>
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<td>ENGL 2963</td>
<td>Survey of Nonwestern Traditions (Hi)</td>
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<td>ENGL 3183</td>
<td>Native American Literature (DH)</td>
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<td>ENGL 3190</td>
<td>Readings in Postcolonial and Multilingual Literature (African Novel)</td>
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<td>ENGL 4330</td>
<td>Studies in Native American Literature</td>
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<td>Special Studies in Foreign Languages and Literatures (Arabic 2 &amp; Mvskoke2)</td>
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<td>GEOG 3053</td>
<td>Introduction to Central Asian Studies (IS)</td>
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<td>GEOG 3733</td>
<td>Russia and Its Neighbors (IS)</td>
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<td>GEOG 3753</td>
<td>Asia (IS)</td>
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<td>GEOG 3763</td>
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<td>GEOG 3783</td>
<td>The Middle East (IS)</td>
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<td>HIST 1713</td>
<td>Survey of Eastern Civilization (H)</td>
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<td>Ancient Mesopotamia: Iraq, Iran &amp; Syria from 4000-333 B.C. (H)</td>
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<td>Russia Since 1861 (HI)</td>
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<td>East Asia to 1800 (H)</td>
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<td>East Asia Since 1800 (HI)</td>
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<td>HIST 3423</td>
<td>Modern Japan (HI)</td>
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<td>Gender Relations in Chinese History (H)</td>
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<td>Medieval Islamic History (H)</td>
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<td>HIST 3523</td>
<td>History of South Asia 1700 - Present (HI)</td>
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<td>HIST 3543</td>
<td>Israel &amp; Palestine in Modern Times (HI)</td>
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<td>HIST 3553</td>
<td>Media and Popular Culture in the Arab Middle East (HI)</td>
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<td>HIST 3583</td>
<td>Minorities and Diversity in the Middle East (H)</td>
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<td>HONR 3033</td>
<td>Contemporary Cultures of the Non-Western World: Honors (IS)</td>
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<td>MUSI 3583</td>
<td>Traditional World Music (HI)</td>
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<td>PHIL 3943</td>
<td>Asian Philosophy (Hi)</td>
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<td>PHIL 4943</td>
<td>Indian Philosophy</td>
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<td>PHIL 4953</td>
<td>East Asian Philosophy</td>
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<td>POLS 3003</td>
<td>The Soviet Union: History, Society and Culture (IS)</td>
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<td>POLS 3053</td>
<td>Introduction to Central Asian Studies (IS)</td>
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<td>Introduction to World Religions (HI)</td>
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<tr>
<td>REL 3573</td>
<td>The Religions of Native Americans (DH)</td>
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</table>
This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).

e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses.

3. Foreign Language Proficiency
   a. The foreign language requirement for the B.A. may be satisfied by 10 hours college credit in the same language, or equivalent proficiency (e.g., passing an advanced standing examination; completing a second-year or higher college-level course in the language, etc.).
   b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second year level of study). It may also be satisfied by any of the options listed above for the B.A. utilizing elective hours.
   c. In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 5 hours college credit in the same language with no grade below C (or pass an advanced standing examination equivalent to 5 hours of college credit).

4. Exclusions
   a. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54 hour maximum allowed from one department.
   b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

5. Teacher Certification
   Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences adviser and the OSU Professional Education Unit in room 325 Willard.