GEOSPATIAL INFORMATION SCIENCE, BS

Degree Requirements

Requirements for Students Matriculating in or before Academic Year 2021-2022. 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

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<th>Code</th>
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General Education Requirements

**English Composition**

See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)

ENGL 1113  Composition I  3
or ENGL 1313  Critical Analysis and Writing I  3
Select one of the following:  3
ENGL 1213  Composition II  3
ENGL 1413  Critical Analysis and Writing II  3
ENGL 3323  Technical Writing  3

**American History & Government**

HIST 1103  Survey of American History  3
or HIST 1483  American History to 1865 (H)  3
or HIST 1493  American History Since 1865 (DH)  3

POLS 1113  American Government  3

**Analytical & Quantitative Thought (A)**

MATH 2144  Calculus I (A)  1  4

**Humanities (H)**

Courses designated (H)  6

**Natural Sciences (N)**

Must include one Laboratory Science (L) course
GEOG 1114  Physical Geography (LN)  1  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**
(Transfer students with 15 hours exempt)  1

**Arts & Humanities**

See note 2.a.  3

**Natural & Mathematical Sciences**

CS 1113  Computer Science I (A)  3

Select 6 additional hours  6
See note 2.b.

**Foreign Language**

See note 3
0-6 hours

**Upper-Division General Education**

Select 6 hours outside major department
See note 2.c.

**Hours Subtotal**  13

**Major Requirements**

Minimum GPA 2.50.

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  Mapping in Modern Society  3
GEOG 4333  Remote Sensing  3
GEOG 4343  Geographic Information Systems: Resource Management Applications  3
GEOG 4353  Geographic Information Systems: Socioeconomic Applications  3
GEOG 4383  Introduction to GIS Programming  3
GEOG 4943  Geospatial Information Science Internship/Research Capstone  3

CS 2133  Computer Science II  3

Select one of the following:  3

STAT 2013  Elementary Statistics (A)  3
STAT 2023  Elementary Statistics for Business and Economics (A)  3
STAT 2053  Elementary Statistics for the Social Sciences (A)  3

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
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 General Education Requirements

**Other Requirements**

- See the College of Arts and Sciences Requirements.
- Minimum GPA 2.00 in all GEOG courses.
- **Upper-Division Credit**: Total hours must include at least 40 hours in courses numbered 3000 or above.
• **Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be applied to degree requirements.

### College of Arts and Sciences Requirements

1. **General Education Requirements**
   No more than two courses (or eight hours) from the major department (http://catalog.okstate.edu/college-arts-sciences-major-departments/) 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, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, 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 (N.W.). 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 applied to the degree.

3. **Foreign Language Proficiency**
   a. The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
   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 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
   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 C. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

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 advisor and the OSU Professional Education Unit in room 325 Willard.

### Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2027.

### Example Plan of Study

**Finish in Four Plan of Study**

The plan below is an example of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td></td>
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</tr>
<tr>
<td>MATH 2144</td>
<td>Calculus I (A)</td>
<td>4</td>
</tr>
<tr>
<td>GEOD 1114</td>
<td>Physical Geography (LN)</td>
<td>4</td>
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### General Education Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>STAT 2013</td>
<td>Elementary Statistics (A)</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 2053</td>
<td>or Elementary Statistics for the Social Sciences (A)</td>
<td></td>
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<tr>
<td>GEOG 2344</td>
<td>Digital Tools for Environmental Exploration (LN)</td>
<td>4</td>
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<tr>
<td>CS 1113</td>
<td>Computer Science I (A)</td>
<td>3</td>
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**General Education Courses**

**Hours:** 6

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Spring</td>
<td>STAT 2013</td>
<td>Elementary Statistics (A)</td>
<td>3</td>
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<tr>
<td>or STAT 2053</td>
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### Sophomore

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<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>GEOG 3333</td>
<td>Spatial Analysis (A)</td>
<td>3</td>
</tr>
<tr>
<td>College and Elective courses</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 2133</td>
<td>Computer Science II</td>
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<td>3</td>
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**Hours:** 16

<table>
<thead>
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<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Spring</td>
<td>GEOG 4203</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
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**Major, College, and Elective courses**

**Hours:** 12

### Junior

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<tr>
<th>Semester</th>
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<th>Hours</th>
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<tr>
<td>Fall</td>
<td>GEOG 4333</td>
<td>Remote Sensing</td>
<td>3</td>
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<tr>
<td>GEOG 4383</td>
<td>Introduction to GIS Programming</td>
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**Major, College, and Elective courses**

**Hours:** 9

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>Spring</td>
<td>GEOG 4323</td>
<td>Mapping in Modern Society</td>
<td>3</td>
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**Major, College, and Elective courses**

**Hours:** 12

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
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<th>Course Title</th>
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<tbody>
<tr>
<td>Fall</td>
<td>GEOG 4343</td>
<td>Geographic Information Systems: Resource Management Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4353</td>
<td>Geographic Information Systems: Socioeconomic Applications</td>
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**Total Hours:** 120