## Bachelor of Arts in Geography-GIS/RS Track

### Course Title S.H.

#### First Year Requirement - Student Success

- YSU 1500 Success Seminar 1-2
- or SS 1500 Strong Start Success Seminar
- or HONR 1500 Intro to Honors

#### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations (Mathematics requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Mathematics Requirement

- STAT 2601 Introductory Statistics 3
- or MATH 2623 Quantitative Reasoning
- or STAT 2625 Statistical Literacy and Critical Reasoning

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model.

#### Arts and Humanities (6 s.h.)

- Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)
- GEOG 1503 Physical Geography (required for major)
- Social Science (6 s.h.)

#### Natural Science elective

3

#### Social Science (6 s.h.)

3

#### Social and Personal Awareness (6 s.h.)

6

#### Foreign Language Requirement

- FNLG 1550 Elementary Foreign Language 4
- FNLG 2600 Intermediate Foreign Language 4

#### MAJOR REQUIREMENTS

At least 21 s.h. of GEOG courses must be at the 3700-level or above. Grade of C or better is required. Courses cannot be taken CR/NC and cannot count towards both the major and minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1503</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4890</td>
<td>Geography Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following courses (3 s.h.):

- GEOG 2626 World Geography 3
- GEOG 2640 Human Geography 3

#### Regional Geography - Select one course from the following (3 s.h.):

- GEOG 3712 Thematic Map Design and Symbolization
- GEOG 3775 Field Methods in Geography
- GEOG 3781 GIS Applications for the Social Sciences
- GEOG 3782 GIS Applications for the Natural Sciences
- GEOG 4801 Advanced Geographic Information Science
- GEOG 4802 Advanced Remote Sensing
- GEOG 4825 Geography Internship
- GEOG 4840 Seminar in Geography
- GEOG 5812 Global Positioning Systems and GIScience
- GEOG 5820 Directed Research in Geography

Select one course from the following (3 s.h.):

- GEOG 3713 Geography of South America
- GEOG 3715 Geography of Middle America
- GEOG 3717 Geography of Europe
- GEOG 3719 Geography of the United States
- GEOG 3721 Geography of Ohio
- GEOG 3750 Topics in Regional Geography
- GEOG 5850 International Area Study

Select one course from the following (3 s.h.):

- GEOG 4801 Advanced Geographic Information Science
- GEOG 4802 Advanced Remote Sensing

Select two additional courses from the following (6 s.h.):

- CSIS 1590 Survey of Computer Science and Information Systems
- CSIS 1595 Fundamentals of Programming and Problem-Solving
- CSIS 3722 Development of Databases
- MATH 2623 Quantitative Reasoning

### Select one of the following courses which satisfies the General Education MATH requirement:

- STAT 2601 Introductory Statistics
- STAT 2625 Statistical Literacy and Critical Reasoning
- MATH 2623 Quantitative Reasoning

#### Minor 18

Electives to meet 120 hours 8

### Total Semester Hours 117-120

#### Year 1

##### Spring S.H.

- ENGL 1551 Writing 2 3
- FNLG 2600 Intermediate Foreign Language 4
- GEOG 2611 Geospatial Foundations 3
- GEOG 3701 Introduction to Geographic Information Science 3
- GEOG 3702 Introduction to Remote Sensing 3
- GEOG 4890 Geography Capstone 3

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- GEOG 4802 Advanced Remote Sensing

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- CSIS 1595 Fundamentals of Programming and Problem-Solving
- CSIS 3722 Development of Databases
- MATH 2623 Quantitative Reasoning

#### Fall

- YSU 1500 Success Seminar 1
- ENGL 1550 Writing 1 3-4
- FNLG 2600 Intermediate Foreign Language 4
- GEOG 2611 Geospatial Foundations 3
- GEOG 3701 Introduction to Geographic Information Science 3
- GEOG 3702 Introduction to Remote Sensing 3
- GEOG 4890 Geography Capstone 3

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- CSIS 3722 Development of Databases
- MATH 2623 Quantitative Reasoning

### Year 2

##### Spring

- Social and Personal Awareness 15XX/26XX-level course 3
- Minor 15XX/26XX-level course 3
- Arts and Humanities 15XX/26XX-level course 3
- CSIS 1595 Fundamentals of Programming and Problem-Solving 1
- GEOG 37XX Regional Geography Elective 3

### Semester Hours 14-16

- Social and Personal Awareness 15XX/26XX-level course 3
- Minor 15XX/26XX-level course 3
- Arts and Humanities 15XX/26XX-level course 3
- CSIS 1595 Fundamentals of Programming and Problem-Solving 1
- GEOG 37XX Regional Geography Elective 3

### Semester Hours 15
## Bachelor of Arts in Geography-GIS/RS Track

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>Fall</td>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
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<tr>
<td>Fall</td>
<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
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<tr>
<td></td>
<td>Social Science 15XX/26XX course</td>
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<td></td>
<td>Natural Science 15XX/26XX level course w/lab</td>
<td>4</td>
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<td></td>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
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<td></td>
<td><strong>Semester Hours</strong></td>
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<th>Spring</th>
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<tbody>
<tr>
<td></td>
<td>Minor 15XX/26XX- level course</td>
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<td></td>
<td>GEOG Elective 37XX/48XX- level course</td>
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<tr>
<td></td>
<td>Minor 15XX/26XX- level course</td>
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<td>Elective 37XX/48XX- level course</td>
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<tr>
<td>Fall</td>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td></td>
<td>GEOG 4801 or GEOG 4802</td>
<td>Advanced Geographic Information Science or Advanced Remote Sensing</td>
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<td>Social Science 15XX/26XX course</td>
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<td>Social and Personal Awareness 15XX/26XX- level course</td>
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<td>CSIS 3722</td>
<td>Development of Databases</td>
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<th>Spring</th>
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<tbody>
<tr>
<td></td>
<td>Minor 37XX/48XX- level course</td>
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<td>GEOG 37XX- level or higher elective</td>
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<td>GIS Elective GEOG 37XX/48XX/58XX- level course</td>
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<td></td>
<td>Elective 37XX/48XX- level course</td>
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<td>Elective 37XX/48XX- level course</td>
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<td><strong>Semester Hours</strong></td>
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<td>Fall</td>
<td>GEOG 4890</td>
<td>Geography Capstone</td>
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<td>Minor 37XX/48XX- level course</td>
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<td>GIS Elective GEOG 37XX/48XX/58XX- level course</td>
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<td>GEOG Elective 37XX/48XX- level course</td>
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<td><strong>Semester Hours</strong></td>
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<td><strong>Total Semester Hours</strong></td>
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## Learning Outcomes

Geography majors, upon fulfilling the requirements of the major, will:

- Demonstrate understanding of the fundamental themes of human and physical geography: region, movement, human/environmental interaction, landscape, and place.
- Demonstrate understanding of spatial patterns and processes in the human and physical environment.
- Effectively use, analyze, and interpret maps and other graphic representations of geographic information.
- Be proficient in geographic methods and techniques such as cartography, GIScience, remote sensing, and field methods.
- Effectively communicate geographic information in written and oral forms.
- Complete a research proposal that requires synthesis of relevant literature and development of a viable geographic research project.

In addition to the above, students completing the GIS/RS Track or a Certificate in Geospatial Science and Technology will:

- Demonstrate proficiency in one or more applications of geospatial technology: geographic information systems, global positioning systems, and remote sensing.