GEOGRAPHIC INFORMATION SYSTEMS, CRT

Requirements for Students Matriculating in or before Academic Year 2023-2024. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Total Hours: 15

A minimum 3.00 GPA is required for all courses taken for the certificate program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GEOG 4203</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>9</td>
</tr>
<tr>
<td>GEOG 4343</td>
<td>Geographic Information Systems: Resource Management Applications</td>
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<tr>
<td>or GEOG 5323</td>
<td>Geographic Information Systems: Resource Management Applications</td>
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<tr>
<td>GEOG 4353</td>
<td>Geographic Information Systems: Socioeconomic Applications</td>
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<tr>
<td>GEOG 5343</td>
<td>Advanced Geographic Information Systems: Resource Management Applications</td>
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</tr>
<tr>
<td>GEOG 5353</td>
<td>Advanced Geographic Information Systems: Socioeconomic Applications</td>
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</tbody>
</table>

Elective Courses
Select 6 hours, choose two courses, each from a different category:

Category I: Spatial Analysis/GIS Programming
- GEOG 3333 Spatial Analysis (A)
- GEOG 4383 Introduction to GIS Programming
- GEOG 5303 Geographic Analysis I
- GEOG 6303 Geographic Analysis II

Category II: Spatial Data Collection, Management, and Representation
- GEOG 4263 Geospatial Applications for Unmanned Aerial Systems
  or GEOG 5263 Geospatial Applications for Unmanned Aerial Systems
- GEOG 4303 Applications of the Global Positioning System in Field Research
- GEOG 4313 Field Techniques and Geodata Collection
- GEOG 4323 Mapping in Modern Society
- GEOG 4333 Remote Sensing
  or GEOG 5333 Remote Sensing
- GEOG 6313 Mixed Methods in Field Research
- GEOG 6333 Advanced Remote Sensing

Courses from other OSU programs that contain at least 50% of geospatial technology in the course content may be considered as alternatives for elective courses. Consult with program coordinator for qualified alternatives.

Total Hours 15