**GEOGRAPHIC INFORMATION SYSTEMS CERTIFICATE**

The objectives of the graduate certificate in Geographic Information Science (GIS) offered through the Department of Geography and the Environment are to provide students with a concentrated geography background focusing on geographic information techniques, to prepare students with technical skills in using GIS, and to qualify students for a wide range of GIS applications. It is possible for students to earn a graduate certificate in GIS while enrolled in another graduate program at the university. The Department of Geography and the Environment is a member of the University Consortium for GIS (UCGIS), and the UN Global Geospatial Information Management Academic Network of Americas.

### Admissions

In addition to the minimum Graduate School admission requirements, to be considered for regular admission an application must include:

1. A BS/BA degree in geography, environmental science, natural resources, land-use management, regional and environmental planning, civil engineering, business applications or other related fields dealing with geographical information
2. Curriculum Vitae (CV)/Resume
3. One letter of recommendation, which discusses and evaluates the student’s aptitude and potential for the certificate program
4. A brief statement of purpose that outlines why the student wishes to earn a graduate certificate in GIS.

For professionals whose current GPA is below 3.0, they can be admitted with “Permission to continue” if they hold a bachelor’s degree and have two or more years of relevant work experience in a field that deals with geographic information, such as geography, natural resources, and land-use management, environmental analysis, regional and environmental planning, civil engineering, or business applications. Applicants also have the option of enrolling as non-degree seeking graduate students first. When the GPA criterion is met, they can apply to be formally admitted to the certificate program. Applicants admitted as non-degree seeking students cannot take classes outside of the GIS Certificate Program.

See the Admission Criteria section of this catalog for more information.

### Curricular Requirements

Objectives of the GIS Certificate Program include: to provide participants with a concentrated geography background focusing on geographic information techniques, to prepare participants with technical skills in using GIS, and to qualify participants to apply GIS in various professional areas. The GIS certificate program requires a total of 20 credit hours, including 12 credit hours of required courses and 8 credit hours for elective courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GY 570</td>
<td>Special Studies Geog (Computer Mapping and Graphics)</td>
<td>12</td>
</tr>
<tr>
<td>GY 520</td>
<td>Remote Sensing I</td>
<td></td>
</tr>
<tr>
<td>GY 530</td>
<td>Intro Geographic Info Systems</td>
<td></td>
</tr>
<tr>
<td>GY 537</td>
<td>GIS for Transportation</td>
<td></td>
</tr>
<tr>
<td>GY 543</td>
<td>Location Science</td>
<td></td>
</tr>
<tr>
<td>GY 516</td>
<td>Geostatistics Using R</td>
<td></td>
</tr>
<tr>
<td>GY 588</td>
<td>Digital Terrain and Watershed</td>
<td></td>
</tr>
</tbody>
</table>

**Transfer Credit**

No credit hours from another institution may be transferred to the GIS certificate program.

**Time Limits for Degree Completion Requirement**

Typically, students are expected to complete all requirements for the GIS certificate program within 1.5-2 years. It is also normal for some students to take just one course a semester and earn the certificate over a longer period.

**Academic Misconduct Information**

Academic misconduct, including cheating, plagiarism, and fabrication of information, will be handled by following the Academic Misconduct Disciplinary Policy:

Graduate School information on Academic Misconduct.

**Withdrawals and Leave of Absence Information**

Graduate School information on Withdrawals and Leave of Absence.

**Academic Grievances Information**

Graduate School information on Academic Grievances.

**Scholastic Requirements**

Students must earn and maintain an overall graduate grade point average (GPA) of 3.0 or better for certificate courses undertaken at The University of Alabama.