Checklist for Geographic Information Science Certificate

Student Name:       Student Number:   
e-mail:             Date of Initial Application:

Core Requirements (all courses are required):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 4080 / 5080</td>
<td>Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4081 / 5081</td>
<td>Introduction to Cartography and Computer Mapping</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4060 / 5060</td>
<td>Remote Sensing I: Introduction to Environmental Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4770 / 5770</td>
<td>Applied Statistics for the Natural Sciences OR Equivalent Course Approved by the GISci Certificate Coordinator</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (students must complete at least two of the following):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 4070 / 5070</td>
<td>Remote Sensing II: Advanced Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4085 / 5085</td>
<td>GIS Applications for the Urban Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4090 / 5090</td>
<td>Environmental Modeling with GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4095 / 5095</td>
<td>Deploying GIS Functionality on the Web</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4235 / 5235</td>
<td>GIS Applications in the Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CE 5382-3</td>
<td>GIS Spatial Database Development</td>
<td>3</td>
</tr>
<tr>
<td>CE 5385-3</td>
<td>GIS Relational Database Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Students may substitute one elective course with one approved by a geographic technology professor (Anthamatten, Moreno, Thomas, Wycoff, or an instructor approved by the GIS coordinator). Up to three elective credits may be satisfied with an approved independent study, internship, or other relevant coursework.

Performance Requirements

Students must earn a 3.0 GPA or better in all approved geographic technology courses.

Graduate Student Requirements

If you have enrolled in the certificate program after having completed a university degree, at least 9 of the 18 credit hours required for the certificate must be graduate-level (5000+) courses.