The Department of Geography offers an online Advanced Geographic Information Systems (GIS) capstone certificate.

This capstone certificate is intended to produce individuals, both inside and outside of Wisconsin, skilled in the conceptual and methodological underpinnings of advanced geographic information systems technology and able to make informed use of current geographic information system applications in real-world problem solving. Capstone certificate students will acquire advanced geographic information systems and related technological skills needed in a wide variety of disciplines, while gaining experience with common commercial and open-source geographic information systems software.

The curriculum provides broad competency in mapping science and spatial analysis, including advanced courses in cartographic design, geovisualization, geocomputing, and spatial and web programming.

**APPLICATION STEPS**

1. Submit an online application for admission (http://continuingstudies.wisc.edu/advising/apply.htm) as a University Special student, selecting UNCS Capstone Certificate and the program: GIS Fundamentals. This application is received and processed by ACSSS with final decision held for approval from GIS Professional Programs Admissions Committee.
2. Fill out the online supplemental application (https://uwmadison.co1.qualtrics.com/jfe/form/SV_bD9etvxCWfHYNpP/). This includes submission of contact information for two references, a letter of interest (one-page essay), and your unofficial transcripts.
3. International students from non-English-speaking countries must also submit TOEFL scores that meet Graduate School minimum requirements (https://grad.wisc.edu/admissions/requirements/).

**ENROLLMENT**

When admitted to the program applicants MUST send their official transcripts to the GIS Professional Programs: 550 North Park Street, Madison, WI 53706. Formal recommendation for admission will only occur after official transcripts have been received from the appropriate institution(s). Admitted students then receive a formal letter of admission to UW–Madison from Adult Career and Special Student Services along with general enrollment information.

The Department of Geography–GIS Capstone Certificate Program will send an email to admitted students with specific information pertaining to enrollment in courses and completion of the capstone program.

Additional detail is provided on the ACSSS enrollment page (http://continuingstudies.wisc.edu/advising/enroll-special.htm).

**REQUIREMENTS**

Students in this program are required to take three (3) of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 378</td>
<td>Introduction to Geocomputing</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 572</td>
<td>Graphic Design in Cartography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 574</td>
<td>Geospatial Database Design and Development</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 575</td>
<td>Interactive Cartography &amp; Geovisualization</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 576</td>
<td>Geospatial Web and Mobile Programming</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 579</td>
<td>GIS and Spatial Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits**: 12

Students are required to maintain a 3.0 GPA while enrolled in the program. Students who do not meet these requirements risk academic probation or dismissal from the program.
MINIMUM REQUIREMENTS FOR CAPSTONE CERTIFICATE COMPLETION

- Students must earn a minimum grade of C in each course used to meet Capstone Certificate requirements.
- Courses in which a student elects the pass/fail or audit option will not count toward completion of Capstone Certificate requirements.
- All of the Capstone Certificate credits must be earned "in residence" (which includes on campus and distance-delivered courses) at UW-Madison.
- All of the Capstone Certificate credits must be earned while enrolled in the Capstone Certificate program.

Individual Capstone Certificate programs may have additional requirements for completion, which will be listed above as/if applicable.

LEARNING OUTCOMES

1. Become grounded in the conceptual and methodological underpinnings of advanced GIS technology in order to make informed use of complex GIS applications in real world problem solving.
2. Acquire advanced technological skills needed in applying GIS towards a wide variety of disciplines while gaining experience with common commercial and open-source GIS software.