

**UW-MADISON GEOGRAPHY DEPARTMENT: COMPARISON OF PROGRAM OFFERINGS IN GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

PROGRAM NAME	MS CARTOGRAPHY/GIS (IN-RESIDENCE)	MS CARTOGRAPHY/GIS (ONLINE OPTION)	CERTIFICATE IN GIS
PROGRAM GOALS	Conduct research in GIS (Studying GIS to develop new techniques in the field of GIS). Emphasis is on the development of new GIS tools or Application of GIS in academic settings.	Acquire professional programming and development skills for web cartography and mobile GIS. Emphasis is on GIS tool creation and map programming using open source software, programming languages, and scripts.	Apply GIS to geographic problems in a non- academic setting. Emphasis is on developing the ability to use GIS techniques.
ADMISSION REQUIREMENT	<ul style="list-style-type: none"> <li>• Bachelor's degree</li> <li>• A course in quantitative methods, two courses in mathematics, and at least two intermediate or advanced courses in geography.</li> </ul>	<ul style="list-style-type: none"> <li>• Bachelor's degree</li> <li>• A course in quantitative methods and two courses in cartography and GIS (or comparable work experience).</li> </ul>	<ul style="list-style-type: none"> <li>• Bachelor's degree</li> <li>• Introductory course in statistical methods.</li> </ul>
TESTING	GRE general test required	GRE <u>not</u> required	GRE <u>not</u> required
REQUIRED	<ul style="list-style-type: none"> <li>• Geog 765 &amp; 766</li> <li>• Geog 370, 375, and 377</li> <li>• 2 courses from Geog 371, 570, 572, 575, 577, 578, or 579</li> <li>• Geog 970</li> </ul>	<ul style="list-style-type: none"> <li>• Geog 378, 579, 572, 575, 574, 576, 670, 672</li> </ul>	<ul style="list-style-type: none"> <li>• Geog 370, 377, 560, and 578</li> <li>• 1 course from Geog 371, 378, 572, or 575</li> </ul>
	Thesis	Capstone project	Capstone project
FULLTIME STUDY	2 years	1-2 years	1 year
TUITION	Students pay graduate tuition and fees. For 2015/16, 8 or more credits are \$5,935 (WI residents) and \$12,598 (non-residents). <i>Example: 10 credits is \$5,935 for residents and \$12,598 for non-residents.</i>	Students pay \$800 per credit. This is a flat rate with no residency required. The program is 32 credits. <i>Example: 10 credits is \$8,000 for both residents and non-residents.</i>	Students pay graduate tuition and fees on a per-credit basis. Tuition is not capped but fees are capped at 8 cr. The 2015/16 tuition rate is \$670 per credit for both in-state and out-of-state residents (plus \$571/semester in fees if taking 8 or more credits). The program is 20/21 credits. <i>Example: 10 credits is \$7,271 for both residents and non-residents.</i>
FINANCIAL AID	<ul style="list-style-type: none"> <li>• Eligible for University-wide fellowships in addition to teaching assistantships, project assistantships, research assistantships, reader positions through the department</li> <li>• Eligible for additional aid through University Financial Aid Office and outside sources</li> </ul>	<ul style="list-style-type: none"> <li>• Not eligible for University fellowships or assistantships. Students are eligible for student hourly positions.</li> <li>• Eligible for additional aid through University Financial Aid Office and outside sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Not eligible for University fellowships or assistantships. Students are eligible for student hourly positions.</li> <li>• Eligible for additional aid through University Financial Aid Office and outside sources.</li> </ul>

*Requirements may be slightly modified based on individual's background. Modifications needs to be worked out with individual student's advisor (or Program Director) and should be approved by the Graduate Affairs and Research Committee*