CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS: GIS DEVELOPMENT, M.S.

This is a named option within the Cartography/GIS M.S (http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/).

This online master's program provides a broad foundation in the theory and application of mapping and geographic information sciences. Graduates of this program will be well prepared for positions as GIS analysts in government agencies, planning organizations, environmental agencies, nongovernmental organizations, and private industry. Completion of this program does not include a thesis. Learn more. (https://geography.wisc.edu/gis/onlinemasters/)

ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. Applicants must meet the minimum requirements (https://grad.wisc.edu/apply/requirements/) of the Graduate School as well as the program(s). Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply/).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>May 1 for international applicants; July 15 for domestic applicants</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>September 1 for international applicants; November 1 for domestic applicants</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>February 1 for international applicants; April 1 for domestic applicants</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Not required.</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation Required</td>
<td>2</td>
</tr>
</tbody>
</table>

FUNDING

GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

PROGRAM INFORMATION

Students enrolled in this program are not eligible to receive tuition remission from graduate assistantship appointments at this institution.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

<table>
<thead>
<tr>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.
Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Requirement</th>
<th>Minimum</th>
<th>Residence Credit Requirement</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Coursework</td>
<td>15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy.</td>
<td>16 credits</td>
<td></td>
<td>30 credits</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>3.00 GPA required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate GPA</td>
<td>This program follows the Graduate School's policy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Grade Requirements</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assessments and Examinations:
- No formal examination is required.
- No language requirement.

REQUIRED COURSES

Students must complete the coursework for breadth requirements at an accredited institution of higher learning prior to entering the program. The Program Director, in consultation with the Program Admissions Committee, may choose to waive these requirements if an applicant provides evidence of sufficient knowledge in these areas gained through work experience. Students must have completed the equivalent of two (2) undergraduate-level courses in GIS and/or Cartography and Visualization, and one (1) course in Quantitative Methods.

<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>
<tr>
<td>GEOG 777</td>
<td>Capstone in GIS Development</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 778</td>
<td>Practicum in GIS Development</td>
<td>4</td>
</tr>
</tbody>
</table>

| Total Credits | 32 |

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate, graduate or certificate programs.

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

NAMED OPTION-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Work from Other Institutions
With program approval, students are allowed to count no more than 7 credits of graduate coursework from other institutions. Coursework earned five or more years prior to admission to a master’s degree or earned ten years is not allowed to satisfy requirements.

UW–Madison Undergraduate
With program approval, students are allowed to count no more than 7 credits of undergraduate graduate coursework from other institutions. Coursework earned five or more years prior to admission to a master’s degree or earned ten years is not allowed to satisfy requirements.

UW–Madison University Special
With program approval, students may count 15 credits taken as a UW–Madison University Special student. Coursework earned five or more years prior to admission to the option may not be used to satisfy requirements.

PROBATION

The Department of Geography expects graduate students to progress through a sequence of benchmarks within prescribed time periods. These benchmarks constitute a reasonable rate of accomplishment for full-time students holding teaching or research appointments. The department recognizes that individual circumstances vary, and not all students progressing toward their academic goals will hit the benchmarks exactly. Thus a student’s progress is considered unsatisfactory only after a period of time elapses following an unmet benchmark. A student not making satisfactory progress is placed on probation. For detailed information about these benchmarks and triggers for probationary status, please see the department’s Criteria for Satisfactory Progress (http://www.geography.wisc.edu/graduate/Criteria%20for%20Satisfactory%20Progress.pdf).

ADVISOR / COMMITTEE

All students are required to conduct a progress report each semester with the program director or manager. Failure to do so will result in a hold being placed on the student’s registration.

CREDITS PER TERM ALLOWED

12 credits

TIME LIMITS

This program follows the Graduate School’s Time Limits policy (https://policy.wisc.edu/library/UW-1221/).
GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https://hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https://facstaffprovost.wisc.edu/)
- Dean of Students Office (https://doso.students.wisc.edu/) (for all students to seek grievance assistance and support)
- Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (https://employeedisabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of programdepartmental or schoolcollege grievance decisions)
- Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office of Student Conduct and Community Standards (https://conduct.students.wisc.edu/) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

Students should contact the department chair or program director with questions about grievances. They may also contact the L&S Academic Divisional Associate Deans, the L&S Associate Dean for Teaching and Learning Administration, or the L&S Director of Human Resources.

OTHER

n/a

PROFESSIONAL DEVELOPMENT

GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School’s professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

PEOPLE

Faculty Director: Jonathan Nelson
Graduate Program Manager: Brittney Krauss
Associated Faculty: A-Xing Zhu, Robert Roth, Qunying Huang, Song Gao, and Jonathan Nelson
Associated Instructors: Justin Cole and Anwar Souunny-Slitine
Department Chair: Jack Williams