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 requires 32 credits and 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</td>
<td>2</td>
</tr>
</tbody>
</table>

The Graduate School sets minimum requirements for admissions (https://grad.wisc.edu/admissions/requirements/). Academic program admission requirements are often more rigorous than those set by the Graduate School. Please check the program’s website (https://geography.wisc.edu/gis/online-masters-program-application-information/) for details on how to apply.

This program accepts applications for the FALL, SPRING, and SUMMER semesters. Please visit the program website for more information on deadlines. (https://geography.wisc.edu/gis/online-masters-program-application-information/)

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 RESOURCES

Students in the GIS Development and Accelerated/Non-Thesis named options are not permitted to accept graduate assistantships or other appointments that would result in a tuition waiver and cannot enroll in other graduate programs nor take courses outside the prescribed curriculum.

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

**Evening/Weekend**: These programs are offered in an evening and/or weekend format to accommodate working schedules. Enjoy the advantages of on-campus courses and personal connections, while keeping your day job. For more information about the meeting schedule of a specific program, contact the program.

**Online**: These programs are offered primarily online. Many available online programs can be completed almost entirely online with all online programs offering at least 50 percent or more of the program work online. Some online programs have an on-campus component that is often designed to accommodate working schedules. Take advantage of the convenience of online learning while participating in a rich, interactive learning environment. For more information about the online nature of a specific program, contact the program.

**Hybrid**: These programs have innovative curricula that combine on-campus and online formats. Most hybrid programs are completed on-campus with a partial or completely online semester. For more information about the hybrid schedule of a specific program, contact the program.

**Accelerated**: These on-campus programs are offered in an accelerated format that allows you to complete your program in a condensed time-frame. Enjoy the
advantages of on-campus courses with minimal disruption to your career. For more information about the accelerated nature of a specific program, contact the program.

**CURRICULAR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirements Detail</th>
<th>Minimum Credit Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>30 credits</td>
</tr>
<tr>
<td>Residence Credit</td>
<td>16 credits</td>
</tr>
</tbody>
</table>

Half of degree coursework must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide.

Overall Graduate GPA Requirement 3.00 GPA required.

**OTHER GRADE REQUIREMENTS**

The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.

**REQUISITE 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

**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 CONSTRAINTS**

For program-specific time constraints, please see Probation Policy above.

**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://facstaff.provost.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 program/departmental or school/college 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.

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

Associated Faculty: Joe Mason (Department Chair), A-Xing Zhu, Robert Roth, Quying Huang, and Song Gao.

Associated Instructors: Justin Cole and Anwar Sounny-Slitine

Staff: Brittney Krauss (GIS Professional Programs Coordinator) and Joel Gruely (GIS Professional Programs Student Services Coordinator)