

CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS, M.S.

The Department of Geography offers a thesis-based master of science in Cartography and Geographic Information Systems, titled Thesis (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/>). In addition, it offers two professional non-thesis options in the Cartography and Geographic Information Systems M.S. titled: GIS Development (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-gis-development-ms/#text>) (online program) and Accelerated/ Non-Thesis (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/#text>) (in-residence program).

Information about facilities, supporting faculty and staff, and program requirements for all graduate programs in the department can be found in the Geography (<http://guide.wisc.edu/graduate/geography/>) listing in this catalog.

The M.S. (Thesis) in Cartography and Geographic Information Systems provides a broad foundation in the theory and application of mapping and geographic information sciences. Students who earn the M.S. (Thesis) degree are prepared to continue on for the Ph.D. in geography or for positions in government agencies, planning organizations, environmental agencies, nongovernmental organizations, and private industry.

ADMISSIONS

Students apply to the Master of Science in Cartography and Geographic Information Systems through one of the named options:

- Accelerated/Non-Thesis, M.S. (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/>)
- GIS Development, M.S. (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-gis-development-ms/>)
- Thesis (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/>)

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

See "How Does Funding Work?" at the Geography Master's FAQ (<https://geography.wisc.edu/graduate/graduate-programs-faq/>).

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

MAJOR REQUIREMENTS CURRICULAR REQUIREMENTS

Requirement Detail

Minimum 30 credits

Credit Requirement

Minimum 16 credits

Residence Credit Requirement

Minimum 15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (<https://policy.wisc.edu/library/UW-1244>) (<https://policy.wisc.edu/library/UW-1244/>).

Overall 3.00 GPA required.

Graduate GPA This program follows the Graduate School's policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

Other Grade Requirements n/a

Assessments and Examinations See Named Options for information.

Language Requirements No language requirement.

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REQUIRED COURSES

Select a Named Option (<https://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/#NamedOptions>) for courses required.

NAMED OPTIONS

A named option is a formally documented sub-major within an academic major program. Named options appear on the transcript with degree conferral. Students pursuing the Master of Science in Cartography and Geographic Information Systems must select one of the following named options:

View as listView as grid

- CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS: ACCELERATED/NON-THESIS, M.S. ([HTTP://GUIDE.WISC.EDU/GRADUATE/GEOGRAPHY/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-MS/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-ACCELERATED-NON-THESIS-MS/](http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/))
- CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS: GIS DEVELOPMENT, M.S. ([HTTP://GUIDE.WISC.EDU/GRADUATE/GEOGRAPHY/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-MS/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-GIS-DEVELOPMENT-MS/](http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-gis-development-ms/))
- CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS: THESIS, M.S. ([HTTP://GUIDE.WISC.EDU/GRADUATE/GEOGRAPHY/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-MS/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-THESIS-MS/](http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/))

2. Identifies sources and assembles evidence pertaining to questions or challenges in cartography/GIScience.
3. Demonstrates understanding of cartography/GIScience in a historical, social, or global context.
4. Selects and/or utilizes the most appropriate methodologies and practices.
5. Evaluates or synthesizes information pertaining to questions or challenges in cartography/GIScience.
6. Communicates clearly in ways appropriate to cartography/GIScience.
7. Recognizes and applies principles of ethical and professional conduct.

PEOPLE

Faculty

Department Chair: John (Jack) Williams

Professors: Ian Baird, Holly Gibbs, Robert Kaiser, Erika Marin-Spiotta, Joseph Mason, Lisa Naughton, Kristopher Olds, Morgan Robertson, Robert Roth, Matthew Turner, John (Jack) Williams, Keith Woodward, A-Xing Zhu

Associate Professors: Aslıgül Göçmen, Qunying Huang, Jenna Loyd, Sarah Moore, Stephen Young

Assistant Professors: Christian Andresen, Song Gao, Ken Keefover-Ring, Almita Miranda, Jen Rose Smith

POLICIES

Students should refer to one of the named options for policy information:

- Accelerated/Non-Thesis, M.S. (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/>)
- GIS Development, M.S. (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-gis-development-ms/>)
- Thesis (<http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/>)

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.

LEARNING OUTCOMES

1. Articulates, critiques, or elaborates the theories, research methods, and approaches to inquiry or schools of practice in cartography and GIScience.