CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS, MS

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 MS 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 MS (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 MS (Thesis) degree are prepared to continue on for the PhD in geography or for positions in government agencies, planning organizations, environmental agencies, nongovernmental organizations, and private industry.

ADMISSIONS

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

- Accelerated/Non-Thesis, MS (http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/)
- GIS Development, MS (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/), MS (http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/)

FUNDING

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/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement 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.

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:

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- **CARTOGRAPHY AND 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, 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, MS (HTTP://GUIDE.WISC.EDU/GRADUATE/GEOGRAPHY/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-MS/CARTOGRAPHY-GEOGRAPHIC-INFORMATION-SYSTEMS-THESIS-MS/)**

POLICIES

POLICIES

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

- Accelerated/Non-Thesis, MS (http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-accelerated-non-thesis-ms/)
- GIS Development, MS (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/), MS (http://guide.wisc.edu/graduate/geography/cartography-geographic-information-systems-ms/cartography-geographic-information-systems-thesis-ms/)

PROFESSIONAL DEVELOPMENT

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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

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1. Articulates, critiques, or elaborates the concepts, theories, methods, and/or approaches to design and inquiry in Cartography and GIScience.
2. Identifies sources, assembles evidence, and/or builds justification for addressing questions or challenges in Cartography and GIScience.
3. Demonstrates understanding of Cartography and GIScience in a historical, social, global, and/or technological context.
4. Selects and/or utilizes the most appropriate methods, technological solutions, and practices to address challenges in Cartography and GIScience.
5. Analyzes, synthesizes, and evaluates information pertaining to questions or challenges in Cartography and GIScience for addressing broad questions in Geography and related fields.
6. Communicates clearly in written, verbal, and visual ways appropriate to Cartography and GIScience.
7. Demonstrates state-of-the-art technical skills in Cartography and GIScience.
8. Recognizes and applies principles of ethical and professional conduct expected in Cartography and GIScience.

PEOPLE

PEOPLE

FACULTY

Department Chair: John (Jack) Williams

Professors: Ian Baird, 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: Song Gao, Asligül Göçmen, Qunying Huang, Jenna Loyd, Sarah Moore, Stephen Young

Assistant Professors: Christian Andresen, Ken Keefover-Ring, Bill Limpisathian, Almita Miranda, Jonathan Nelson