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# CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS: THESIS, MS

# **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

| Face to Face | Evening/<br>Weekend | Online | Hybrid | Accelerated |
|--------------|---------------------|--------|--------|-------------|
| Yes          | No                  | No     | No     | No          |

### **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**

## Requirement Detail

Minimum 30 credits

Credit

Requirement

Minimum 16 credits

Residence Credit Requirement

Minimum 15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework

Coursework (50%) Requirement policy: https://policy.wisc.edu/library/

Requirement UW-1244 (https://policy.wisc.edu/library/UW-1244/).

Overall 3.00 GPA required.

Graduate Refer to the Graduate School: Grade Point Average GPA (GPA) Requirement policy: https://policy.wisc.edu/library/ W-1203 (https://policy.wisc.edu/library/UW-1203/).

Other Grade n/a Requirements

Assessments A formal thesis is required.

and

Examinations

Language No language requirement.

Requirements

# **REQUIRED COURSES**

| Code                           | Title   | Credits |
|--------------------------------|---|---------|
| Required                       |   |         |
| GEOG 765<br>& GEOG 766         | Geographical Inquiry and Analysis:<br>An Introduction<br>and Geographical Inquiry and<br>Analysis: Techniques | 4       |
| GEOG 370                       | Introduction to Cartography   | 4       |
| GEOG/CIV ENGR/<br>ENVIR ST 377 | An Introduction to Geographic Information Systems   | 4       |
| GEOG 378                       | Introduction to Geocomputing  | 4       |
| GEOG 970                       | Seminar in Geographic Information Science <sup>1</sup>  | 3       |
| Select two of the foll         | 6-8   |         |
| GEOG 572                       | Graphic Design in Cartography   |         |
| GEOG 573                       | Advanced Geocomputing and Geospatial Big Data Analytics   |         |
| GEOG 574                       | Geospatial Database Design and Development  |         |
| GEOG 575                       | Interactive Cartography & Geovisualization  |         |
| GEOG 576                       | Geospatial Web and Mobile<br>Programming  |         |
| GEOG 578                       | GIS Applications  |         |
| GEOG 579                       | GIS and Spatial Analysis  |         |
| <b>Remaining Credits</b>       | 3-5   |         |
|                                | es numbered 300 and up in ir advisor to meet the 30 credit  |         |
| Total Credits                  |   | 30      |

<sup>&</sup>lt;sup>1</sup> GEOG 970 must be taken for 3 credits.