

## Minor in GISc

Geographic information exists in every discipline. Students who are interested in geotechnology are encouraged to complete the minor in Geographic Information Science (GISc). This program provides an overview of a variety of geotechnological skills, including cartography, remote sensing, geographic information systems, and global positioning systems.

### **Career Opportunities**

- Surveying and cartography: surveyors, cartographers, photogrammetrists, and mapping technicians
- Environmental resource management: environmental scientists, specialists, and health specialists
- Urban and regional planning: architects, engineers, local government, and GIS analysts
- Cultural and society: policy consultant, GIS scientists
- IT industry: application developer, database administrator, project manager

### **GISc Minor Requirements (minimum 20 qtr hrs.)**

#### **• Required courses**

GEOG 2100 Introduction to Geographic Information Systems (Fall, Winter, Spring, Summer)

GEOG 3200 Remote Sensing (Fall, Winter, Spring)

#### **• Electives:**

In addition to the required courses, the following courses are offered every year:

GEOG 2000 Geographic Statistics (Winter, Spring)

GEOG 2020 Computer Cartography (Fall, Winter)

GEOG 3000 Advanced Geographic Statistics (Spring, Prerequisite: GEOG2000)

GEOG 3120 Environmental & GIS Modeling (Spring, Prerequisite: GEOG3100/4110)

GEOG 3010 Geographic Information Analysis (Spring, Prerequisite: GEOG2100)

GEOG 3130 GIS Programming with Python (Winter, Prerequisite: GEOG2100)

GEOG 3140 GIS Database Design (Fall, Prerequisite: GEOG2100)

GEOG 3170 Geospatial Analysis Project (Winter)

GEOG 3190 Lidar: Theory and Applications (Prerequisite: GEOG2100/GEOG3200)

GEOG 3230 Advanced Remote Sensing (Fall, Prerequisite: GEOG3200)

#### **The following courses are offered every other year:**

GEOG 3410 Urban Applications in GIS

GEOG 3470 GIS and Environmental Health Geography

GEOG 3701 Topics in Geographic Information Science

GEOG 3860 GIS Application in Natural Resources

#### **• Internship and directed study:**

Credit hours received from GIS internship or directed study may be counted towards the minor.

#### **Note:**

Geography majors may emphasize GISc as part of their degree program.

They are not eligible to complete the minor in GISc.