



Required Credits: 12 Required GPA: 2.25

## I REQUIRED COURSES

Note: The Geographic Information Science certificate is not available to students pursuing the Geography, BS major GIScience emphasis or to students pursuing the GIScience minor.

It is advised that students not having previously taken a GIS course include GEOG 3231, Introduction to Geographic Information Systems, as one of their courses.

Select 4 courses from the following list:

- GEOG 3226 Cartography (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4150 Applications of Machine Learning (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)