# Geographic Information Science, Certificate

#### Requirements

The undergraduate Certificate in Geographic Information Science requires a minimum of 19 s.h. of credit, including at least 12 s.h. earned at the University of Iowa. Students must maintain a grade-point average of at least 2.00 in work for the certificate. Courses taken pass/nonpass do not count toward the certificate.

The certificate may be earned by any student admitted to the University of Iowa who is not enrolled in a UI graduate or professional degree program. Undergraduate to Graduate (U2G) students may earn the certificate when the undergraduate classification is primary.

Students who major in geography (geographic information science track) or who earn a minor in geographic information science may not earn the Certificate in Geographic Information Science.

Students who are interested in a specialization in geographic information systems, in remote sensing, or those who seek a more general background may want to select certain options when they plan their certificate coursework. For more information, contact the Department of Geographical and Sustainability Sciences.

Students must complete all of a course's prerequisites before they register for the course.

The Certificate in Geographic Information Science requires the following coursework.

### **Core Courses**

Course #	Title	Hours
All of these:		
GEOG:2050	Foundations of GIS	4
GEOG:3500/ IGPI:3500	Introduction to Environmental Remote Sensing	3
GEOG:3540/ IGPI:3540	Geographic Visualization	3

### **Geographic Analysis Electives**

Course #	Title	Hours
One of these:		
GEOG:3050/ IGPI:3050	Geospatial Programming	3
GEOG:4500/ IGPI:4500	Advanced Remote Sensing	4
GEOG:4580/ IGPI:4581	Introduction to Geographic Databases	3

## **Application Electives**

Course #	Title	Hours
Two of these:		
GEOG:1030	Our Digital Earth	3

GEOG:3520/ IGPI:3520	GIS for Environmental Studies	3
GEOG:3570	Light Detection and Ranging (LiDAR): Principles and Applications	3
GEOG:4150/ GHS:4150/ IGPI:4150	Health and Environment: GIS Applications	3