

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 is designed to provide the knowledge and skills needed to work with geographic information and prepare individuals to work in this growing profession. The certificate coursework helps build a knowledgeable geospatial workforce that understands how to use geographic information science properly and applies this understanding to improve transportation systems, improve water quality, or make companies more productive.

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 pursuing the Geographical and Sustainability Sciences BS with the GIS track cannot also earn the GIS certificate.

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 School of Earth, Environment, and Sustainability.

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:		
SEES:2050	Foundations of GIS	4
SEES:3500/ IGPI:3500	Introduction to Environmental Remote Sensing	3
SEES:3540/ IGPI:3540	Geographic Visualization	3

Geographic Analysis Electives

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

Application Electives

Course #	Title	Hours
At least two of these:		
SEES:1035	Our Digital Earth	3
SEES:3520/ IGPI:3520	GIS for Environmental Applications	3
SEES:3570	Light Detection and Ranging (LiDAR): Principles and Applications	3
SEES:4150/ GHS:4150/ IGPI:4150	Health and Environment: GIS Applications	3