

Fundamentals of Geographic Information Science (GIS) Certificate

Program requirements

Admission

A foundation in geographic information science (GIS) through prior coursework or professional work experience, approved by the department, is required for admission to the Fundamentals of GIS Program. Students without prior GIS experience can meet this requirement by completing GEO 590 Independent Study in Geography and Environmental Science. This course will provide the foundational GIS knowledge taught in GEO 305 Geographic Information Systems and Science I and additional GIS graduate level applications and learning objectives. Credits earned in GEO 590 do not count towards the Fundamentals of GIS Program.

Curriculum

Code	Title	Credits
Core		
GEO 505	Geographic Information System and Science II	3
Electives		
Select six credits from any of the following. Courses are grouped by potential areas of focus.		6
Field mapping		
GEO 510	Geospatial Field Methods	
GEO 512	Geospatial Applications of Unmanned Aerial Systems	
Remote sensing		
GEO 515	Remote Sensing of the Environment I	
GEO 545	Remote Sensing of the Environment II	
Geovisualization		
GEO 518	Map Design and Geovisualization	
GEO 555	Web Mapping	
Geospatial data analysis		
GEO 565	Geospatial Automation	
GEO 585	Geographic Information System and Science III	
GEO 588	Quantitative Methods in Geography	
Total Credits		9

Students are required to develop a GIS portfolio and submit it to the program advisor to complete the Fundamentals of GIS Program.