

Certificate Programs in Geographic Information Systems (GIS)

The Department of Geosciences offers undergraduates a Certificate in Geographic Information Systems and an Advanced Certificate in Geographic Information Systems. Departmental majors or other students who complete the programs with a grade of "C" or better in each course are entitled to the GIS Certificates. Students should consult with their departmental advisor or another faculty member about registration for these programs.

Certificate in Geographic Information Systems

Required Courses for GIS Certificate

Introduction to Mapping and GIS	GIS 3015C	3
Remote Sensing of the Environment	GIS 4035C	3
Principles of GIS	GIS 4043C	3

Choose one course from the following list:

Photogrammetry and Aerial Photograph Interpretation	GIS 4021C	3
Digital Image Analysis	GIS 4037C	3
Applications in GIS	GIS 4048C	3
Geovisualization and GIS	GIS 4138C	3

Advanced Certificate in Geographic Information Systems

The Advanced Certificate in Geographic Information Systems allows students to develop an in-depth understanding of programming and spatial data analysis through two required courses, and it allows them to expand their expertise in one additional applied area of Geographic Information Science. The requirements for completing the advanced certificate are: the GIS certificate plus the two required courses and one additional course from the list below.

Required Courses for Advanced GIS Certificate

Programming in GIS	GIS 4102C	3
Spatial Data Analysis	GEO 4167C	3

Choose one of the following applied courses:

Digital Image Analysis	GIS 4037C	3
Transportation and Spatial Organization	GEO 4700	3
Hydrogeology Project Design	GLY 4837C	3
Geovisualization and GIS	GIS 4138C	3
Special Topics	GEO 4930	3