

Post-Baccalaureate GeoTechnology Certificate

Goals

1. Graduates will have the knowledge and skills necessary to apply Geotechnology in their chosen careers or fields of interest.
2. Graduates will have the background to compete successfully for industrial and academic positions.

GEOL 6648	Research Problems
Total Credits	19

For current information regarding GIS Center and courses, see the website: <http://giscenter.isu.edu>. (<http://giscenter.isu.edu/>)

Objectives

1. Learn and perform techniques in Geographic Information Systems, Global Positioning Systems, Remote Sensing, and related skills.
2. Increase knowledge of how geotechnical applications are incorporated into research, education, and industry.
3. Increase knowledge of geotechnical workforce needs and the future directions of geotechnological applications.

The Graduate Certificate in GeoTechnology is offered to students who wish to become proficient in the collection, management, and analysis of spatial data. Courses in three disciplines — geographic information systems (GIS), global positioning systems (GPS), and remote sensing—are used to teach the theory and application of GeoTechnology. Students may pursue the Certificate independently or in conjunction with another Idaho State University degree.

Admission Requirements

Classified admission is necessary to complete the Certificate and is recommended by the graduate faculty of the Geosciences Department in accordance with standards set by the Graduate School. Applicants must have a bachelor’s degree from an accredited school and meet the Graduate School admission requirements. All applicants must submit an application to the Graduate School.

Students will complete 14 credits of required coursework and 5 credits of elective coursework to obtain the Certificate. The following courses are relevant:

Code	Title	Credits
Core Courses:		14
GEOL 5503	Principles of Geographical Information System	
GEOL 5504	Advanced Geographic Information Systems	
GEOL 5507	GPS/GNSS Applications in Research	
GEOL 5508 or BIOL 5518	GeoTechnology Seminar Ecological Topics	
GEOL 5509	Remote Sensing	
Electives		5
ANTH 5582	Independent Problems in Anthropology	
BIOL 5582	Independent Problems	
GEOL 5527	Information Technology for GIS	
GEOL 5528	Programming for GIS	
GEOL 5580	Special Topics in GIS	
GEOL 5581	GeoTechnology Internship	
GEOL 6607	Spatial Analysis	
GEOL 6608	Geostatistics Spatial Data Analysis and Modeling	
GEOL 6611	UAS Applications for the Geosciences	
GEOL 6628	Advanced GIS Programming	