

GEOGRAPHIC INFORMATION SCIENCE AND TECHNOLOGY - UNDERGRADUATE MINOR

GEOG 488	GIS for Water Resources
Total Credits	18-19

Overview

The Department of Geography and Environmental Studies offers an Undergraduate Minor in Geographic Information Science and Technology (GIS&T). This minor is available to all undergraduate students, except Geography majors, and provides a valuable concentration for those seeking jobs that involve spatial data collection and analysis.

Career opportunities span diverse fields, including data and information management, urban and regional planning, water resource management, ecology, cultural resource management, emergency management, and public health.

Program Learning Outcomes

Upon completion of the Undergraduate Minor in Geographic Information Science & Technology, students will be able to:

1. Think spatially, geographically, and geospatially.
2. Explain basic and advanced concepts, methods, and applications in geographic information science and technology, including geographic information systems and remote sensing.
3. Solve real-world problems by acquiring, analyzing, interpreting, evaluating, and visualizing spatial data.

More Information

See the Requirements tab for details on course and credit expectations for earning the Undergraduate Minor in GIS&T.

Course and Credit Requirements

The Department of Geography and Environmental Studies offers an undergraduate minor in Geographic Information Science and Technology (GIS&T). This minor is available to all undergraduate students, except Geography majors, and provides a valuable concentration for those pursuing professional careers that involve spatial data collection and analysis. Career opportunities span diverse fields, including data and information management, urban and regional planning, water resource management, ecology, cultural resource management, emergency management, and public health.

To earn the undergraduate minor in GIS&T, students must complete the following required courses, totaling 18-19 credits. All courses must be taken for a letter grade, with a minimum grade of C- required in each course.

Prefix	Title	Credits
Departmental Requirements		
GEOG 373	Introduction to Remote Sensing	4
GEOG 381	Cartography and GIS	4
GEOG 481	Fundamentals of GIS	4
Select 6-7 credits from the following:		6-7
GEOG 442	Programming for GIS	
GEOG 473	Advanced Remote Sensing	
GEOG 485	Spatial Analysis and Modeling	