

UNDERGRADUATE CERTIFICATE IN GEOSPATIAL APPLICATIONS (AS OF SPRING 2024)

Students will take geospatial courses in the Department of Environmental and Geosciences to learn about GIS and related software applications, geospatial technology, mapping, cartography, and geospatial analysis.

Students must meet the University's general admissions standards. Any student who meets these standards (Minimum GPA = 2.0) can be considered for admission. GEOG 2464 serves as the prerequisite for all upper-level GIS courses.

Code	Title	Hours
Undergraduate Certificate in Geospatial Applications		
Required Courses		
GEOG 2464	Intro to Geographic Info Sys	4
GEOG 4365	Applied Geographic Info Systems	3
Prescribed Electives		
Choose three from the following:		9-10
GEOG 3363	Computer Cartography	
GEOG 4311	GIS in Law Enforcement	
GEOG 4361	Geographic Information Systems for Public Health	
GEOG 4367	GIS Programming	
GEOG 4468	Remote Sensing	
Total Hours		16-17

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX** plan and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The Undergraduate Certificate in Geospatial Applications is designed to provide graduates with the following marketable skills:

- Apply software tools to analyze geospatial data.
- Design and create professional-quality maps.
- Use geospatial analysis to solve economic, social, and environmental problems.
- Discuss the use of GIS, remote sensing, and GPS applications in various disciplines.
- Construct workflows for geospatial projects.