

CERTIFICATE IN GEOSPATIAL TECHNOLOGY

Overview

The Certificate Program in Geospatial Technology (GT) is designed to benefit students who seek to enhance their skills in geospatial technology, especially Geographic Information Systems (GIS) and satellite remote sensing. The Certificate requires a minimum of 15 credit hours, including three core courses and two or more electives. Students may receive credit toward the Certificate for past coursework completed at UM or other accredited schools. All fifteen credits may be double counted toward the M.A. degree, making it possible for a student to complete both the M.A. and the Certificate in two years.

Curriculum Requirements

Code	Title	Credit Hours
GIS Certificate Program Core Courses		
GEG 691	Geographic Information Systems I	3
GEG 692	Remote Sensing of the Environment	3
GEG 693	Geographic Information Systems II	3
GIS Certificate Program Electives		
Select 6 credit hours from the following:		6
GEG 603	Research Design in Geography	
GEG 612	Health Applications of Geographic Information Systems	
GEG 616	Urban Analytics Geovisualization	
GEG 625	Advanced Independent Study in Geography I	
GEG 635	Internship in Geography	
GEG 645	Advanced Independent Study in Geography II	
GEG 665	Land Use Planning	
GEG 680	Spatial Data Analysis I	
GEG 681	Spatial Data Analysis II	
GEG 685	Digital Cartography	
GEG 695	Web GIS	
Other approved electives		
Total Credit Hours		15

* Note that all courses from the Certificate Program can be double counted toward the MA in Geography Degree.

** Students are encouraged to find a suitable internship experience with the Career Planning and Placement Center or with the GIS Program Director. Upon approval by the GIS Program Director, 3 credit hours may be earned with an internship (GEG 635)

*** For more information, e-mail Dr. José Maria Cardoso da Silva at jcsilva@miami.edu

Mission

This graduate certificate program is designed for students who seek to enhance their skills in geospatial technology, especially Geographic Information Systems (GIS) and satellite remote sensing. Students will learn to work with geospatial datasets using industry-standard software including ArcGIS, ERDAS IMAGINE, TerrSet, and SPSS.

Goals

Graduates of the program will improve their employment prospects and/or advance their careers in geospatial technology, particularly in job settings that stress the use of satellite remote sensing and vector-based GIS.

Student Learning Outcomes

- Students will demonstrate skills in the interpretation of geospatial datasets, statistical datasets and remotely sensed imagery, and in the preparation of those datasets for analysis and creation of maps and other products. Students will also demonstrate an understanding of the concepts and applications of geospatial technology, and apply them appropriately to the practice of mapping and digital cartography.