

Geographic Information Science (GIS) Certificate

This certificate program focuses on the theory and techniques of geographic information science (GISci). Geographic Information Science (GISci) is a suite of techniques for collecting, analyzing, and communicating information through geographic information systems (GIS), satellite and aerial imaging (Remote Sensing), global positioning systems (GPS), and related technologies. GISci is applied to problems in fields ranging from environmental science to urban planning to business decision-making. This certificate program builds qualifications for employment and/or further study in GISci.

Students interested in this certificate should contact Ms. Robbyn Abbitt (Department of Geography; 109 Shideler Hall; 513-529-5016; abbittrj@miamioh.edu)

Program Requirements

(18 semester hours)

Code	Title	Credit Hours
GEO 441	Geographic Information Systems	3
GEO 442	Advanced Geographic Information Systems	3
GEO 443	Python Programming for Geospatial Applications	3
GEO 448	Techniques and Applications of Remote Sensing	3
Select two of the following:		6
GEO 242	Mapping a Changing World	
GEO 340	Internship ¹	
GEO 444	GIScience Techniques in Landscape Ecology	
GEO 445	Geographic Information Systems for Criminal Justice	
CIT 214 or ISA 245	Database Design and Development Database Systems and Data Warehousing	
CSE 148 or CSE 243	Business Computing (Add "GIS Requirement" to ROR request) Problem Analysis Using Computer Tools	
CSE 174	Fundamentals of Problem Solving and Programming	
CSE 252	Web Application Programming	
ENT 135	Computer-Aided Drafting	
IMS 259	Art and Digital Tools I	
GEO 460	Advanced Systematic Geography ^{Topic} must be approved by advisor	
Total Credit Hours		18

¹ With the expectation that the internship involves GIS.