

SPATIAL AND INFORMATION TECHNOLOGY MINOR

Program Overview

Understanding the way that entities are organized in space is critical for identifying trends and opportunities in a vast range of fields, including business, marketing, politics, urban planning, landscape design, and the environmental sciences. This interdisciplinary minor introduces students to the tools of spatial analysis, such as Geographic Information Systems (GIS) and database management, that will allow them to produce the mapping, spatial visualization, and trend analysis required in an array of applications. Moreover, students will gain enough facility with coding to be able to develop their own tools or improve those currently available, allowing them to apply spatial analysis in new or specialized applications, and to keep up with a rapidly changing field.

The minor requires GIS through the intermediate level, basic computer coding using Python (the language of GIS applications), database management, and an advanced, hands-on GIS experience. This experience should allow students to develop their skills in a semester-long project, and also to focus their learning in an area in which they have a particular interest.

Program Requirements

Code	Title	Hours
CS 065	INTRODUCTION TO COMPUTER SCIENCE I	3
CS 066	INTRODUCTION TO COMPUTER SCIENCE II	3
ENSS 065	GEOGRAPHIC INFORMATION SYSTEMS	3
ENSS 165	APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS	3
IS 160	DATABASE MANAGEMENT	3
Advanced Geographic Information Systems Experience ¹		3
Total Hours		18

¹ Consult advisor to plan an internship; independent study; research; or advanced, problem-based spatial technology course.