

# GEOGRAPHIC INFORMATION SYSTEMS (GIS)

---

## GIS 120 (3 credit hours)

### Introduction to Geographic Information Systems

Presents a comprehensive survey of the fundamental concepts of GIS, providing students a command over the software to import raster and vector data into a GIS and to conduct simple analyses over their data. Intended for those with limited experience with GIS who are exploring career opportunities in the field. Lecture: 3 credits (45 contact hours).

**Components:** LEC: Lecture

## GIS 145 (3 credit hours)

### Remote Sensing

Introduces remote sensing of the earth with topics that include the physical principles of remote sensing, history and future trends, sensors and their characteristics, image data sources, and image classification and analysis techniques. Lecture: 3.0 credits (45 contact hours).

**Pre- or co-requisite:** CIT 125 or consent of instructor.

**Attributes:** Technical

**Components:** LEC: Lecture

## GIS 255 (3 credit hours)

### Geospatial Programming

Examines customization of GIS software applications by way of modified service interface elements while covering topics in theory and implementation of the various scripting languages currently used. Prepares students to solve geospatial problems and streamline GIS workflows through the creation and modification of scripts. Lecture: 3.0 credits (45 contact hours)

**Pre-requisite:** CIT 125 or consent of instructor.

**Attributes:** Technical

**Components:** LEC: Lecture

## GIS 260 (3 credit hours)

### Geospatial Web Mapping

Introduces the design, publishing, optimization and maintenance of geospatial servers, and basic geospatial web services and applications. Includes an introduction to browser and mobile enabled interactive applications. Lecture: 3.0 credits (45 contact hours).

**Pre-requisite:** CIT 125 or consent of instructor.

**Attributes:** Technical

**Components:** LEC: Lecture