

GIS - GEOGRAPHIC INFORMATION SYSTEMS

GIS 190 **4 credit hours (lecture: 3 | lab: 2)**

Geographic Information Systems I

This course provides an introduction to digital maps, spatial analysis, and technology to explore geographic and spatial patterns. Introduces the concepts and components of a geographic information system (GIS), the basic concepts of remote sensing and Global Positioning System (GPS), and the ESRI ArcGIS® software. This course will also explore selected cases of GIS application in different disciplines to introduce students to problem solving and decision making using geospatial analysis. Credit toward graduation cannot be received for both GIS 190 and EAS 190.

Instruction Type: In-Person | Online | Hybrid Fee: \$50

Term Typically Offered: Fall | Spring | Summer

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Geographic Information Systems II

The course covers geodatabase development, maintenance, organization, and editing within ESRI's ArcGIS applications. Basic features and functionality of geodatabases as well as tools for creating and editing the geometry of spatial data are covered. Students learn to create and manipulate geographic information systems (GIS) features and to explore the analytical capabilities of GIS and apply them to real-world situations, including GIS projects developed by public safety officials, public works departments, planners, geographers, resource managers, engineers, and other industry professionals. Credit toward graduation cannot be received for both GIS 191 and EAS 191.

Recommended: GIS 190 or consent of instructor.

Instruction Type: In-Person | Online Fee: \$50