



## GIS 101: Introduction to Geographic Information Systems

This course introduces students to the concepts required to run Geographic Information Systems (GIS). Topics include a basic understanding of what GIS is; elements of cartography, including scale, projection, coordinate systems, digitizing, geography, and spatial and statistical analysis; GIS capabilities; and case studies. The course introduces students to the ArcGIS software package. Pre or co-requisite: EGR 103. Two lecture hours and two laboratory hours per week. Instructional Support Fee applies.

### Course Student Learning Outcomes

1. Define what a Geographic Information System is 2. Define what Geospatial Technology is 3. Understand the cartographic principles of scale, projections, labels, legends, and coordinate systems 4. Apply cartographic principles to produce dynamic electronic maps 5. Apply selected spatial analysis techniques to solve geospatial related problems 6. Develop a basic understanding of the use of ESRI's ArcGIS 10.x software

**Credits:** 3

**Program:** Geographic Information Systems