Course Prefix and Number: GIS 295  Credits: 3

Course Title: Topics in GIS: Introduction to Geospatial Information Systems I

Course Description (including lecture hours, lab hours, total contacts)

Introduces the use of geospatial information system technology (GIS) as it applies to architectural and civil engineering technology. Prerequisite: computer literacy. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose

An introduction to the basic concepts and the use of GIS technology specific to technicians in the civil and architectural design professions.

Course Prerequisites/Corequisites

Computer literacy

Course Objectives

Upon completing the course, the student will be able to:

- Understand the principles of real-time map and database integration
- Use systematic methodology for geographic planning and decision making.
- Utilize the tools to GIS to execute cartographic mapping, analysis, and editing

Major Topics to be Included

- 3D analysis, graphing, and data exploration
- Integration of GIS and traditional CAD documents
- Role and use of GPS (Global Positioning Systems) technology with GIS applications
- Role of GIS and emerging BIM technology, in particular, as it applies to LEED certification

Effective Date of Course Content Summary: September 13, 2010