

## **CIT 220—Systems Analysis and Design (3)**

### Course Description

Methodologies for developing business-oriented computer information systems are covered including the definition of needs, creation of specifications, and implementation of systems. Modern systems analysis software tools are covered. Lecture: 3 hours.  
Prerequisites: ENG102 or concurrent; or consent of instructor. A Level I Programming Language recommended.

### Course Competencies

Upon successful completion of this course, the student can:

1. Describe the role, functions, and importance of information within a management context.
2. Explain the need for an orderly, structured methodology for the development of computer information systems.
3. Describe implementation procedures for both life cycle and prototyping approaches to systems development.
4. Itemize and define the phases of a systems project.
5. Apply the systems development life cycle to business-oriented case studies.
6. Perform as a member of a team and present ideas related to the systems analysis approach.

### Course Outline

- I. Introduction to Information Systems
  - A. Information System Components
  - B. The Systems Development Life Cycle
- II. Preliminary Investigation
  - A. Preliminary Investigation Process
  - B. Preliminary Investigation Objectives
- III. Systems Analysis
  - A. Requirements Determination
  - B. Requirements Analysis
  - C. Evaluating Alternatives and Strategies
- IV. System Design
  - A. Output Design
  - B. Input Design
  - C. File and Database Design
  - D. System Architecture
- V. System Development
  - A. Application Development
  - B. Installation and Evaluation
- VI. Systems Operation and Support
  - A. Support Activities
  - B. System Obsolescence