

# CIT 280 - SYSTEMS ANALYSIS AND DESIGN

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## Course Description

This is the capstone course in the CIT Developer AAS. Students will gain practical knowledge in systems analysis and design through participation in a team-based software/hardware project that follows the systems development life cycle using agile development with industry patterns and practices. A capstone project will be developed and presented to a review group. Students will conduct a feasibility study, perform requirements analysis, model objects and data, develop and test the solution, and communicate effectively. Group 2 course.

## Credit Hours

4

## Contact Hours

5

## Lecture Hours

3

## Lab Hours

2

## Required Prerequisites

CIT 255 with a grade of 2.0 or higher

## Recommended Prerequisites or Skills

## Competencies

CIT 228

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Describe how systems analysis contributes to successful application development.
- Compare and contrast systems analysis and design methodologies.

### Application:

- Document system requirements and architecture using a variety of systems analysis graphical representations, tools, and techniques.

### Integration:

- Use an appropriate systems analysis and design methodology to develop a complete and original information solution that will include requirement collection, feasibility verification, cost justification, proposal, project planning and management, design, construction, testing, deployment, and documentation.

### Human Dimension:

- Demonstrate interpersonal communication skills while discussing systems analysis and design decisions with team members and stakeholders.

- Demonstrate the ability to effectively critique their peer's work.
- Construct a functional user interface (UI) and experience (UX).

### Caring - Civic Learning:

- Explore how well designed systems add value to society.

### Learning How to Learn:

- Develop a set of professional resources to maintain throughout their career.