



Software Requirements Analysis

CSE 5232

Credit Hours:

2.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Information systems analysis; object-oriented analysis models and tools; use cases, system modeling using UML; requirements specification development; term project.

Prerequisites and Co-requisites:

Prereq: 3241 or 3901 or 3902 or 3903 (560) or 5241 (670).

Course Goals / Objectives:

- Master applying an object-oriented methodology to the analysis of a real-world problem.
 - Be competent with writing use cases to model functional requirements.
 - Be competent with using UML use case, class, sequence and collaboration diagrams to model data and behavior requirements.
 - Be competent with organizational dynamics as it applies to projects.
 - Be competent with the system lifecycle approach and its phases.
 - Be familiar with software engineering issues such as correctness, reliability, productivity.
 - Be familiar with the distinction between analysis and design activities and skills.
 - Be familiar with working with a team to produce requirements specification document.
 - Be familiar with the purpose, structure and contents of a requirements specification document.
 - Be familiar with non-functional requirements such as security, integrity, response time and reliability.
 - Be familiar with using a UML tool.
-

Course Topics:

- Software engineering, software development life cycle, traditional vs object-oriented analysis
 - Teamwork and organizational dynamics
 - Data flow diagramming (as context model)
 - UML (use case diagram, sequence diagram, collaboration diagram, state chart diagram, class diagram)
 - Requirements elicitation (face-to-face meetings and presentations to real-world client)
-

Designation:

Elective