

CSCE 490 - Capstone Computing Project I

Credit Hours: 3 hours

Contact Hours: 3 lecture hours

Instructor: Dr. Vidal

Required Textbooks: None

Bulletin Description: Major team-based software design project to be undertaken in a student's final year of study; project planning, software requirements analysis, design, and specification. Written reports and oral presentations in a technical setting.

Prerequisites: CSCE 240, 311, either ENGL 462 or 463

Required Course in CE, CIS, and CS programs

Learning Outcomes: Students will be able to:

1. Pursue an independent project under time and resource constraints;
2. Refine a topic, formulate an approach, and solve a significant technical problem to achieve the project goal;
3. Organize and work as a team to design and accomplish an independent project under time and design constraints;
4. Design a computer based system, consisting of an appropriate mix of software and possibly hardware components, using the techniques, skills, and tools of modern computer system development practice.
5. Develop effective written and oral skills to communicate among team members as well as with outsiders in a real-world styled environment.

Student (Program) Outcomes addressed by course (Detailed mappings of these course outcomes to the Student Outcomes of the programs are in the detailed syllabus and the Assessment plan.)

Student Program Outcomes	SOs supported	SOs Moderately supported
Computer Engineering	a, b, c, d, e, f, g, h, j, k	
Computer Information Systems	a, b, c, d, e, f, g, IS-j	
Computer Science	a, b, c, d, e, f, g, CS-k	

Topics covered:

1. Teaming
2. Project management and scheduling
3. Requirements specification and optimization
4. System Design
5. Functional decomposition
6. UML models
7. Software Development
8. Oral presentations
9. Reports