

## CSCE 492 - Capstone Computing Project II

**Credit Hours:** 3 hours

**Contact Hours:** 3 team meeting hours with Professor

**Instructor:** Dr. Jose Vidal

**Required Textbooks:** None

**Bulletin Description:** Continuation of CSCE 490. Computer system implementation, testing, verification and validation of results. Written reports and oral presentations in a technical setting.

**Prerequisites:** CSCE 490

**Required Course** in CE, CIS, and CS programs

**Learning Outcomes:** Students will be able to:

1. Plan and complete 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,c,d,e,f,g,h,i,j,k	
Computer Information Systems	a,b,c,d,e,f,h,i,IS-j	
Computer Science	a,b,c,d,e,f,h,i,CS-k	

**Topics covered:**

1. Testing
2. Teamwork
3. Design Process
4. Design Principles
5. Software Development Methodologies
6. Design Patterns
7. Git and GitHub: Revision Control