

## 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:** D or better in CSCE 240, CSCE 350, and CSCE 490
- **Required Course** in CE, CIS, and CS
- **Course Outcomes:** Students will be able to:
  1. Apply new technologies such as software platforms, unit and behavioral testing libraries, and continuous integration tools, and use them in the development of a software application.
  2. Perform quality assurance analysis on a software application.
  3. Design and implement 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.
  4. Work effectively as part of a team. Make significant contributions to the team's work.
  5. Communicate (written and orally) skillfully with peers and with outsiders in a real-world styled environment.
- **Student Outcomes addressed by course**

Program	Student Outcomes Addressed
Computer Engineering	2, 3, 5, 6, 7
Computer Information Systems	1, 2, 3, 5, 6
Computer Science	1, 2, 3, 5, 6

- **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