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.)

<table>
<thead>
<tr>
<th>Student Program Outcomes</th>
<th>SOs supported</th>
<th>SOs Moderately supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Engineering</td>
<td>a,c,d,e,f,g,h,i,j,k</td>
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<tr>
<td>Computer Information Systems</td>
<td>a,b,c,d,e,f,h,i,IS-j</td>
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<tr>
<td>Computer Science</td>
<td>a,b,c,d,e,f,h,i,CS-k</td>
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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