Undergraduate Degree Program
Computer Engineering - BS

Mission Statement
Educate and Foster the Habit of Individual Inquiry, Life-Long Technical Learning, Leadership and Achievement through Top Quality Academic Opportunities.

Student Learning Outcomes
FIU Computer Engineering - BS graduates should be able to achieve the following:

<table>
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<tr>
<th>Content/Discipline Knowledge Skills</th>
<th>Direct Measures</th>
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<tbody>
<tr>
<td>Students show ability to apply knowledge of mathematics to solve problems related to the area of computer engineering.</td>
<td>Procedure: A comprehensive exam is given to all senior CE (Computer Engineering) students enrolled in &quot;EEL 4611L Systems Lab&quot; at the end of fall and spring semesters. The exam consists of a set of CE related problems, which covers the knowledge of (a) Probability &amp; Statistics, (b) Complex variables, (c) Differential Equations. The CE UPAC (Undergraduate Program Assessment Committee), consisting of three faculty members in the area, reviews the results and recommends possible actions to the ECE faculty for approval. The Undergraduate Program Director chairs the committee. Actions will be implemented yearly.</td>
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<tr>
<td>Sampling: All students in ‘EEL 4611L Systems Lab’</td>
<td>Minimum Criteria for Success:</td>
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### Technology Integration:
Students demonstrate the ability to develop software for hardware interface in computer engineering practice.

### Procedure:
All of the design projects in "EEL 4921C Senior Design II: Project Implementation" are presented on Senior Project Day at the end of fall and spring semesters. The proficiency of using modern design tools and problem solving is evaluated by comprehensive exam results plus results from the IAB (Industrial Advisory Board) and program alumni using a designed rubric. The CE UPAC analyzes the collected information and proposes action items to the ECE faculty. Actions will be implemented yearly.

### Sampling:
All the students in "EEL 4921C"

### Critical Thinking Skills
Students will show ability to select and evaluate different versions of design with various design methodologies and technologies.

### Direct Measures

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| Students will show ability to select and evaluate different versions of design with various design methodologies and technologies. | **Procedure:**

Students will score a 3 or better on a 4-point rubric that focuses on mathematics. The scale used is given below.

- 4: excellent
- 3: good
- 2: average
- 1: poor
Assessment methods used are Comprehensive Exam and Industrial Advisory Board review of Senior Design II projects. All Senior Design proposals include two sections:
(a) discuss and compare various design tools, methodologies, and technologies for the proposed system design
(b) justify the selected methodology and technology using experiments and results. The CE UPAC reviews these two sections and makes recommendations of actions to the ECE faculty meeting to enhance student learning. Actions will be implemented yearly.

**Sampling:**
All CE senior students

**Minimum Criteria for Success:**
Students will score a 2 or better on a 4-point rubric.
- 4: excellent
- 3: good
- 2: average
- 1: poor

**Communication Skills**
Students will demonstrate the ability to write effectively.

**Direct Measures**

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<td>All of the senior design project reports from EEL 4921C will be evaluated at the end of fall and spring semesters. The project results are evaluated by the Senior Design Coordinator and the CE UPAC members by using the designed rubric. The CE UPAC makes recommendations of actions to the ECE faculty. Exit survey results are included to provide feedback from student perspective. Actions are evaluated and implemented yearly.</td>
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All the students in EEL 4921C

**Minimum Criteria for Success:**
Students will score a 2 or better on a 4-point rubric.
- 4: excellent
- 3: good
- 2: average