Assessment Plan

Degree Program - ENG - Electrical Engineering (BSEE)

CIP Code: 14.1001.00
Degree Program Coordinator: Brian Nutter; Stephen Bayne
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Program Purpose Statement: The mission of Texas Tech University is to provide the highest standard of excellence in higher education while pursuing continuous quality improvement, stimulating the greatest degree of meaningful research, and supporting faculty and staff in satisfying those we serve. The Department of Electrical and Computer Engineering supports the mission of the university through its undergraduate programs by providing students with appropriate curricula and educational experiences. The curricula remain current through continuing assessment by employers, alumni, faculty, and students. Students obtain a broad education necessary to understand the impact of electrical and computer engineering solutions in a global, societal, and environmental context.

Modality: Face-to-Face, Off Campus Face-to-Face

Student Learning Outcome: ABET Criterion 3.1
An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.
Outcome Status: Active
Outcome Type: Student Learning
Start Date: 08/23/2018

Assessment Methods

Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 3302, Fundamental of Electrical Engineering (Active)
Criterion: 75% or better attainment
Schedule: Long Semester Fall

Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 3303, Linear Systems Analysis (Active)
Criterion: 75% or better attainment
Schedule: Long Semester Fall

Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 3341, Electromagnetic Theory I (Active)
Criterion: 3.5 or higher on question querying this issue on exit survey
Schedule: Long Semester Spring

Survey - Student - Senior Exit Survey (Active)
Criterion: 3.5 or higher on question querying this issue on exit survey

Student Learning Outcome: ABET Criterion 3.2
An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw...
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### Student Learning Outcome: ABET Criterion 3.3
An ability to communicate effectively with a range of audiences.

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<thead>
<tr>
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### Assessment Methods

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<th>Assessment</th>
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<tr>
<td><strong>Course Level Assessment</strong> - Direct Assessment</td>
<td>by evaluating assignments in course ECE 3331, Project Laboratory I (Active)</td>
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<tr>
<td><strong>Criterion:</strong></td>
<td>75% or better attainment</td>
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<td>Long Semester Fall</td>
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| **Course Level Assessment** - Direct Assessment | by evaluating assignments in course ECE 4333, Project Laboratory IV (Active) |
| **Criterion:** | 75% or better attainment |
| **Schedule:** | Long Semester Spring |

| **Survey - Student** - Senior Exit Survey (Active) |
| **Criterion:** | 3.5 or higher on question querying this issue on exit survey |

### Student Learning Outcome: ABET Criterion 3.4
An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

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| **Schedule:** | Long Semester Spring |

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Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 4333, Project Laboratory IV (Active)
Criterion: 75% or better attainment
Schedule: Long Semester Spring

Survey - Student - Senior Exit Survey (Active)
Criterion: 3.5 or higher on question querying this issue on exit survey

Student Learning Outcome: ABET Criterion 3.5
An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
Outcome Status: Active
Outcome Type: Student Learning
Start Date: 08/23/2018

Assessment Methods
Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 3331, Project Laboratory I (Active)
Criterion: 75% or better attainment
Schedule: Long Semester Fall

Survey - Student - Senior Exit Survey (Active)
Criterion: 3.5 or higher on question querying this issue on exit survey

Student Learning Outcome: ABET Criterion 3.6
An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.
Outcome Status: Active
Outcome Type: Student Learning
Start Date: 08/23/2018

Assessment Methods
Course Level Assessment - Direct Assessment by evaluating assignments in course ECE 3331, Project Laboratory I (Active)
Criterion: 75% or better attainment
Schedule: Long Semester Fall

Survey - Student - Senior Exit Survey (Active)
Criterion: 3.5 or higher on question querying this issue on exit survey

Student Learning Outcome: ABET Criterion 3.7
An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
Outcome Status: Active
Outcome Type: Student Learning
Start Date: 08/23/2018
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