Program Educational Objectives

List of Program Educational Objectives

The Educational Objectives of the Electrical and Computer Engineering program at Baylor University are:

1. to provide graduates with the academic preparation necessary to be productive and successful engineers.
2. to prepare graduates with the knowledge and skill necessary for interacting effectively with society.
3. to prepare graduates, within an educational environment shaped by Christian ideals, for the thoughtful integration of work and life and to view the engineering profession as a lifelong commitment to serving others.

Illustration of Process for Evaluating Program Educational Objectives
Program Outcomes and Assessment

a. List of Program Outcomes

The ECE faculty have carefully considered our Program Educational Objectives. Based on these objectives, the faculty believes that the outcome requirements of Criterion 3 are consistent with our Program Educational Objectives and can effectively be used for assessing and improving our program. For completeness, our ECE program outcomes are listed below.

(a) an ability to apply knowledge of mathematics, science, and engineering

(b) an ability to design and conduct experiments, as well as to analyze and interpret data

(c) an ability to design a system, component, or process to meet desired needs

(d) an ability to function on multi-disciplinary teams

(e) an ability to identify, formulate, and solve engineering problems

(f) an understanding of professional and ethical responsibility

(g) an ability to communicate effectively

(h) the broad education necessary to understand the impact of engineering solutions in a global and societal context

(i) a recognition of the need for, and an ability to engage in life-long learning

(j) a knowledge of contemporary issues

(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Relationship between Program Objectives and Program Outcomes

<table>
<thead>
<tr>
<th>Objective</th>
<th>Weighting Matrix for Program Outcomes to Program Educational Objectives</th>
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<td>a</td>
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<tr>
<td>(1)</td>
<td>0.15</td>
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<tr>
<td>(2)</td>
<td>0.25</td>
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<td>(3)</td>
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(3) To prepare graduates, within an educational environment shaped by Christian ideals, for the thoughtful integration of work and life and to view the engineering profession as a lifelong commitment to serving others