<table>
<thead>
<tr>
<th>Program:</th>
<th>Computer Engineering – Electrical Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree:</td>
<td>BS</td>
</tr>
<tr>
<td>Department:</td>
<td>Electrical and Computer Engineering</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Windy M. Lala</td>
</tr>
<tr>
<td>Contact Phone:</td>
<td>979/458-3127</td>
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</table>

**Outcome** | Master the depth of knowledge required for a degree  
**Marketable Skills**  
- (1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics  
- (6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions  
- (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

**Outcome** | Demonstrate critical thinking  
**Marketable Skills**  
- (1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics  
- *Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.  
- *Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

**Outcome** | Communicate effectively  
**Marketable Skills**  
- (3) an ability to communicate effectively with a range of audiences  
- *Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

**Outcome** | Practice personal and social responsibility  
**Marketable Skills**  
- (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

**Outcome** | Demonstrate social, cultural, and global competence  
**Marketable Skills**  
- (2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

**Outcome** | Prepare to engage in lifelong learning  
**Marketable Skills**  
- (7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies  
- *Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.
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<th>Outcome</th>
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| Marketable Skills | • (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  
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  • *Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times. |

Notes:

- Marketable skills listed with an asterisk (*) for this example program were drawn from the Knowledge, Skills, and Abilities identified by the US Department of Labor and Statistics for “computer hardware engineers” as published on O*Net Online (onetonline.org)
- Marketable skills listed with a letters (1)-(7) for this example program were drawn from ABET Criterion 3.
- Alternate sources for degree-specific marketable skills include learning outcomes and associated metrics used for programmatic assessment
- Learning outcomes or skills required for programmatic accreditation
Program: Computer Engineering – Computer Science Track
Degree: BS
Department: Electrical and Computer Engineering
Contact Name: Scott Schaefer
Contact Phone: 979-862-4673

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