<table>
<thead>
<tr>
<th>Program:</th>
<th>Computer Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree:</td>
<td>PhD</td>
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<tr>
<td>Department:</td>
<td>Electrical and Computer Engineering</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Katie Bryan</td>
</tr>
<tr>
<td>Contact Phone:</td>
<td>845-7467</td>
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### Outcome
Master degree-program requirements, including theories, concepts, principles, and practice; develop a coherent understanding of the subject matter through synthesis across courses and experiences; and apply subject matter knowledge to solve problems and make decisions.

#### Marketable Skills
- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- 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
Apply a variety of strategies and tools, use a variety of sources, and evaluate multiple points of view to analyze and integrate information and to conduct critical, reasoned arguments.

#### Marketable Skills
- 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
- an ability to communicate effectively, both orally and in writing, with a range of audiences
- Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

### Outcome
Develop clear research plans, conduct valid, data-supported, theoretically consistent, and appropriate venues to a range of audiences.

#### Marketable Skills
- an ability to develop meaningful investigation plans
- an ability to conduct data-supported and theoretically consistent research

### Outcome
Use appropriate technologies to communicate, collaborate, conduct research, and solve problems.

#### Marketable Skills
- an ability to use relevant technologies to perform research tasks, collaborate, and problem solve
<table>
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<tr>
<th>Outcome</th>
<th>Teach and explain the subject matter in their discipline.</th>
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| Marketable Skills | • an ability to teach the subject matter to others at the undergraduate or graduate level in a way that results in increased understanding of the content  
• an ability to use assessment to determine how students are meeting learning outcomes, and adjusting teaching methods accordingly |

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<tr>
<th>Outcome</th>
<th>Choose ethical courses of action in research and practice.</th>
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| Marketable Skills | • an ability to demonstrate professional and ethical responsibility in every aspect of research project  
• an ability to demonstrate professional responsibility, including timeliness in attending meetings, performing tasks in a timely manner, and treating other with professional respect |