<table>
<thead>
<tr>
<th>Specialization Area</th>
<th>Required Undergraduate Preparation</th>
<th>Required Courses in Quantitative Methods</th>
<th>Courses for Specialization Area</th>
<th>Suggested Breadth Areas</th>
<th>Courses for Acquiring Breadth in this Area</th>
</tr>
</thead>
</table>
**Instructions**

These guidelines provide a roadmap for students in either Plan A or Plan B. Before meeting with the ECE Department Graduate Advisor, a classified student should prepare a Program of Study using these guidelines in selecting the courses to be declared for the degree program. The Program of Study, which must be submitted to the ECE Department Office by the end of the first semester or before completing nine units of graduate work, should follow the guidelines given below:

**General Comments**
- Quantitative course must be taken in the first year of program
- At most four (4) 500 level courses are accepted for graduate program
- Other courses (including special topics courses) may be offered occasionally which may also be taken for credit under the area of specialization, subject to the approval of the Graduate Advisor

**Plan A Students: Total of 30 units**
- Choose at least four (4) courses in the area of specialization: (12 units)
- Choose one (1) course in each of two breadth areas: (6 units)
- Take required quantitative (core) course: (3 units)
- Register for six units of EE 797 (research) and three units of EE 799A (thesis): (9 units)

**Plan B Students: Total of 30 units**
- Choose at least five (5) courses in area of specialization: (15 units)
- Choose two (2) courses in each of two breadth areas (12 units)
- Take required quantitative (core) course (3 units)

Neither all courses listed nor all areas of specialization may be available and are subject to the State of California and university funding. Please contact the ECE Department for more information.
Graduate Courses Tentatively Offered in Fall and Spring Semesters

**Important Note:** This is just a tentative schedule and is intended to help students plan their Program of Study ahead of time. The courses and the semesters are subject to change without prior notice. Offering of the courses is also contingent upon the availability of the instructors.

### Fall Semesters

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE502</td>
<td>Electronic Devices Rehab</td>
</tr>
<tr>
<td>EE540</td>
<td>Microwave Devices and Systems</td>
</tr>
<tr>
<td>EE556</td>
<td>Digital Signal Processing</td>
</tr>
<tr>
<td>EE558</td>
<td>Digital Communications</td>
</tr>
<tr>
<td>EE596</td>
<td>Renewable Energy Smart Grid</td>
</tr>
<tr>
<td>EE600</td>
<td>Advanced Power Electronics</td>
</tr>
<tr>
<td>EE601</td>
<td>Linear Sys Theory &amp; Design</td>
</tr>
<tr>
<td>EE602</td>
<td>Stochastic Signals &amp; Systems</td>
</tr>
<tr>
<td>EE631</td>
<td>RF Electronics Circuits</td>
</tr>
<tr>
<td>EE645</td>
<td>Antennas and Propagation</td>
</tr>
<tr>
<td>EE654</td>
<td>Adaptive Algorithms</td>
</tr>
<tr>
<td>EE655</td>
<td>Modem Design</td>
</tr>
<tr>
<td>EE657</td>
<td>Digital Image Processing</td>
</tr>
<tr>
<td>EE662</td>
<td>Wireless Sensor Networks</td>
</tr>
<tr>
<td>EE672</td>
<td>VLSI System Design</td>
</tr>
<tr>
<td>EE674</td>
<td>Signal and Power Integrity</td>
</tr>
<tr>
<td>COMPE560</td>
<td>Computer and Data Networks</td>
</tr>
<tr>
<td>COMPE565</td>
<td>Multimedia Communication Systems</td>
</tr>
<tr>
<td>COMPE572</td>
<td>VLSI Circuit Design</td>
</tr>
<tr>
<td>COMPE571</td>
<td>Embedded Operating System</td>
</tr>
</tbody>
</table>

### Spring Semesters

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE503</td>
<td>Biomedical Instrumentation</td>
</tr>
<tr>
<td>EE540</td>
<td>Microwave Devices and Systems</td>
</tr>
<tr>
<td>EE556</td>
<td>Digital Signal Processing</td>
</tr>
<tr>
<td>EE581</td>
<td>Power System Dynamics</td>
</tr>
<tr>
<td>EE602</td>
<td>Stochastic Signals &amp; Systems</td>
</tr>
<tr>
<td>EE634</td>
<td>RF Circuit Design</td>
</tr>
<tr>
<td>EE641</td>
<td>RF Wireless Systems</td>
</tr>
<tr>
<td>EE650</td>
<td>Modern Communication Theory I</td>
</tr>
<tr>
<td>EE652</td>
<td>Principles &amp; App of Information Theory</td>
</tr>
<tr>
<td>EE653</td>
<td>Coding Theory</td>
</tr>
<tr>
<td>EE656</td>
<td>Multirate Signal Processing</td>
</tr>
<tr>
<td>EE658</td>
<td>Advanced Digital Signal Process</td>
</tr>
<tr>
<td>EE660</td>
<td>High Speed Net Design</td>
</tr>
<tr>
<td>EE665</td>
<td>Multimedia Wireless Networks</td>
</tr>
<tr>
<td>EE600</td>
<td>Digital ASIC Design</td>
</tr>
<tr>
<td>EE685</td>
<td>MEMS Design and Applications</td>
</tr>
<tr>
<td>COMPE560</td>
<td>Computer and Data Networks</td>
</tr>
<tr>
<td>COMPE561</td>
<td>Database and Web Programming</td>
</tr>
<tr>
<td>COMPE565</td>
<td>Multimedia Communication Systems</td>
</tr>
</tbody>
</table>

COMPE572 | VLSI Circuit Design |
| COMPE571 | Embedded Operating System |