Program Learning Objectives

Our goal is to create a graduate degree program and a learning environment that result in graduates who possess the following:

1. Technical competency in their chosen disciplines;
2. Effective communication skills;
3. Awareness of the impacts of technology on society and the environment;
4. Understanding of ethics and responsible professional conduct;
5. Strong interpersonal and teamwork skills;
6. Appreciation of the need for life-long learning;
7. Leadership/planning/decision-making skills;
8. Critical thinking/complex problem-solving skills.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EE 525</td>
<td>Stochastic Processes</td>
<td>4</td>
</tr>
<tr>
<td>or EE 513</td>
<td>Control Systems Theory</td>
<td></td>
</tr>
<tr>
<td>EE 563</td>
<td>Graduate Seminar (1, 1, 1)</td>
<td>3</td>
</tr>
<tr>
<td>EE 599</td>
<td>Design Project (Thesis) or 9 units of approved Technical Electives and a comprehensive written examination)</td>
<td>9</td>
</tr>
</tbody>
</table>

Additional Electrical Engineering Graduate Courses

Select from the following:

1. EE 502 Microwave Engineering
2. EE 509 Computational Intelligence
3. EE 511 Electric Machines Theory
4. EE 513 Control Systems Theory
5. EE 514 Advanced Topics in Automatic Control
6. EE 515 Discrete Time Filters
7. EE 518 Power System Protection
8. EE 519 Advanced Analysis of Power Systems
9. EE 520 Advanced Solar-Photovoltaic Systems Design
10. EE 521 Computer Systems
11. EE 522 Advanced Real-Time Operating Systems Design
12. EE 523 Digital Systems Design
13. EE 524 Solid State Electronics
14. EE 526 Advanced Digital Communications
15. EE 527 Advanced Topics in Power Electronics
16. EE 528 Digital Image Processing
17. EE 529 Microwave Device Electronics
18. EE 530 Fourier Optics
19. EE 533 Antennas
20. EE 541 Advanced Microwave Laboratory
21. EE 544 Solid-state Electronics and VLSI Laboratory

Approved Technical Electives (400-500 level)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td></td>
<td>May be selected from the course list above and other advisor approved technical electives.</td>
<td>17</td>
</tr>
</tbody>
</table>

Total units 45

1. At least 8 units of approved Technical Electives must be at 500 level.
2. Not all courses listed are offered each academic year. Consult the EE Department for current information on course offerings.