Shaded boxes represent Foundation courses

= Course prerequisites

Elective Requirements - In addition to the above, EE majors must complete 4 additional upper-division elective courses (minimum of 3 courses from one track). Unlisted graduate-level courses may be used to fulfill an elective requirement with prior department approval. Most, if not all elective courses have pre-reqs; because they are subject to change frequently please visit http://www.soe.ucsc.edu/courses to ensure you have met them.

Electronics & Optics Track
EE 115 Intro to MEMS Design
EE 130/L / 230 Optical Fiber Communication
EE 136 Engineering Electromagnetics (Strongly Recommended)
EE 154 Feedback Control Systems
EE 157/L RF Hardware Design/Lab
EE 172 / 221 Advanced Analog Integrated Circuits
EE 178 Device Electronics
EE 211 Introduction to Nanotechnology
EE 231 Optical Electronics
EE 175/L Energy Generation and Control
EE 176/L Energy Conversion and Control
EE 177/L Power Electronics
AMS 147 Computational Methods & Applications
CMPE 118/L Intro to Mechatronics
CMPE 121/L Microprocessor System Design (Strongly Recommended)
CMPE 173/L High Speed Digital Design

Communications, Signals, Systems, & Controls Track
EE 130/L / 230 Optical Fiber Communication
EE 136 Engineering Electromagnetics (Strongly Recommended)
EE 152 / 252 Intro to Wireless Signals/Systems
EE 153 / 250 Digital Signal Processing
EE 154 / 241 Feedback Control Systems
EE 262 Statistical Signal Processing
EE 264 Image Processing and Reconstruction
AMS 147 Computational Methods & Applications
CMPE 118/L Intro to Mechatronics
CMPE 150/L Intro Computer Networks
CMPE 251 Error-Control Coding

Senior Design Project
EE 123A Engineering Design Project I (EE 171 and CE 100 and previous or concurrent enrollment in CE 185 and previous or concurrent enrollment in at least one of the following: EE 157, CE 118 or CE121 and permission of instructor )

EE 123B Engineering Design Project II (EE 123A)

or

EE 195 Senior Thesis (10 units over 2 quarters) (Department Approval)

Prior to graduation, you are required to:
1. Complete an Exit Survey
2. Attend an Exit Interview with a designated EE faculty
3. Maintain a 2.5 cumulative GPA in all required & elective courses for the major, OR Submit a Portfolio for Department Review, OR Submit a Senior Thesis with Department Approval

** Students who completed Math 21 and Math 24 (or the equivalents) in lieu of AMS 10 and 20 are strongly encouraged to take the Matlab self-paced tutorial prior to enrolling in EE 101/L.
### ELECTRICAL ENGINEERING CURRICULUM CHART
#### 2010-2011

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPE 80E</td>
<td>Engineering Ethics</td>
</tr>
<tr>
<td>PHIL 22</td>
<td>Intro to Ethical Theory</td>
</tr>
<tr>
<td>PHIL 24</td>
<td>Intro to Contemporary Ethics: Contemporary Moral Issues</td>
</tr>
<tr>
<td>PHIL 28</td>
<td>Environmental Ethics</td>
</tr>
<tr>
<td>BME 80G or PHIL 80G</td>
<td>Bioethics in the 21st Century: Science, Business, and Society</td>
</tr>
</tbody>
</table>

### Approved List of Ethics Courses:

- CMPE 80E Engineering Ethics
- PHIL 22 Intro to Ethical Theory
- PHIL 24 Intro to Contemporary Ethics: Contemporary Moral Issues
- PHIL 28 Environmental Ethics
- BME 80G or PHIL 80G Bioethics in the 21st Century: Science, Business, and Society

### Approved programming options:

- CMPS 12A/L Intro to programming (accelerated)
- OR
  - CMPS 5J Intro to programming in JAVA and CMPS 11 Intermediate Programming

### STUDENT’S NAME:

### STAFF ADVISOR:

### FACULTY ADVISOR: