ELECTRICAL ENGINEERING CURRICULUM CHART 2009-2010

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
AMS 147 Computational Methods & Applications
CMPE 121/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 or previous or concurrent enrollment in at least one of the following: EE 157, CE 118 or CE121 and permission of instructor ) F & W
EE 123B Engineering Design Project II (EE 123A) W & S

or

EE 195 Senior Thesis (10 units over 2 quarters) (Department Approval) F,W,S

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.
## 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: