Elective Requirements - In addition to the above, students must complete at least 15 units of upper-division or graduate electrical engineering courses (all from one track). 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 104 Bio-electronics & Bio-instrumentation
- EE 115 Intro to MEMS Design
- EE 130/L / 230 Optical Fiber Communication
- EE 135/L Electromagnetic Fields & Waves
- EE 136 Engineering Electromagnetics (Strongly Recommended)
- EE 145/L Properties of Materials
- EE 154 / 241 Feedback Control Systems
- EE 157/L RF Hardware Design/Lab
- EE 172 / 221 Advanced Analog Integrated Circuits
- EE 175/L Energy Generation and Control
- EE 176/L Energy Conversion and Control
- EE 177/L Power Electronics
- EE 178 Device Electronics
- EE 211 Introduction to Nanotechnology
- EE 213 Nanochannelization of Materials
- EE 231 Optical Electronics
- EE 180J Advanced Renewable Energy Sources
- CMPE 118/L Intro to Mechatronics
- CMPE 121/L Microprocessor System Design (Strongly Recommended)
- CMPE 173/L High Speed Digital Design
- AMS 147 Computational Methods & Applications

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 251 Principles of Digital Communications
- EE 253 Introduction to Information Theory
- EE 261 Error Control Coding
- EE 262 Statistical Signal Processing
- EE 264 Image Processing and Reconstruction
- CMPE 118/L Intro to Mechatronics
- CMPE 150/L Intro Computer Networks
- CMPE 251 Error-Control Coding
- AMS 147 Computational Methods & Applications

* Students who complete Math 21 and 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 MINOR
#### DEGREE CURRICULUM 2010-2011

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**STUDENT’S NAME:**

**STAFF ADVISOR:**

**FACULTY ADVISOR:**