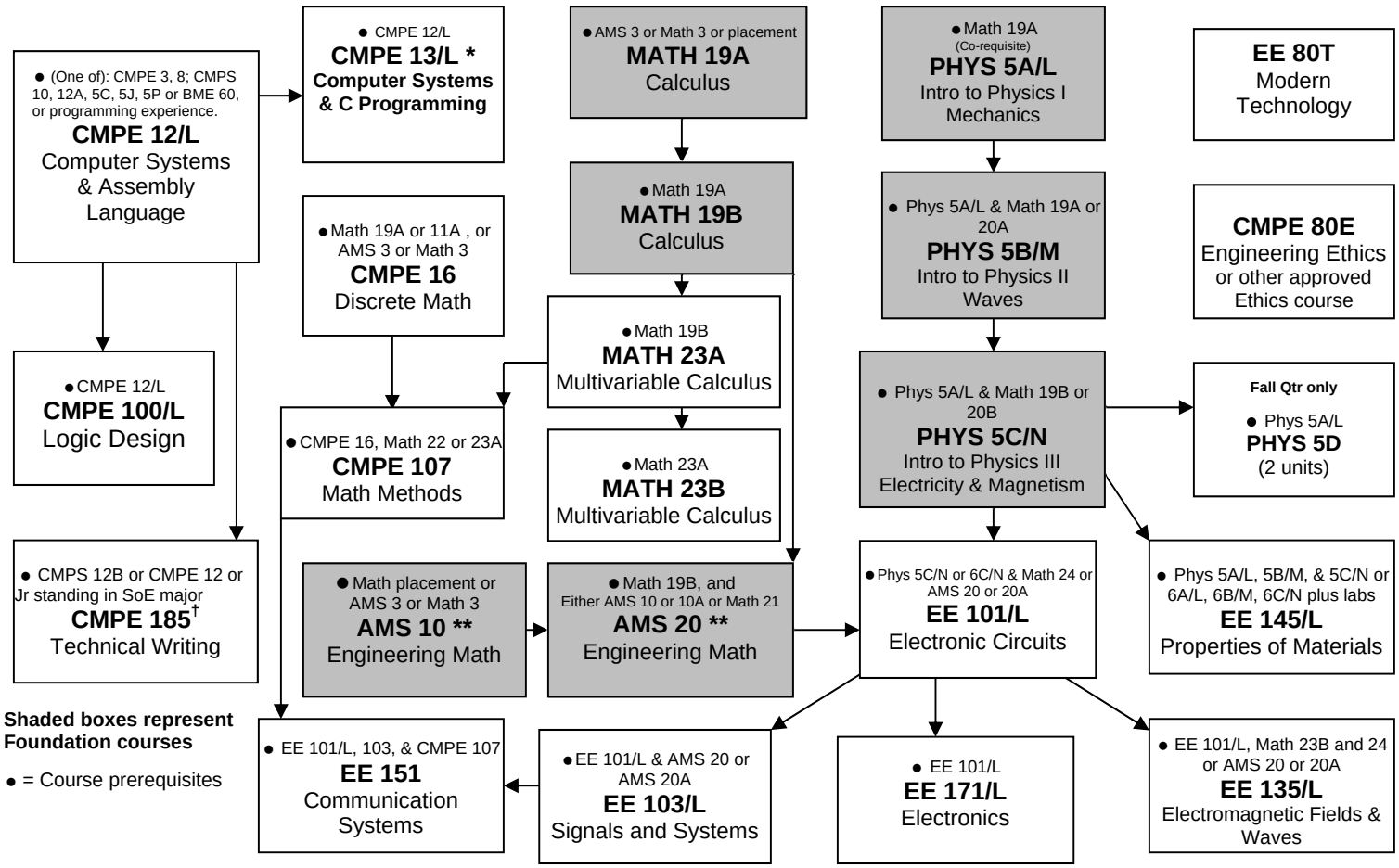
Electrical Engineering B.S. Degree
Curriculum Chart: 2013-2014



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. They are subject to change frequently please visit http://www.soe.ucsc.edu/courses to ensure you have met them.**

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

Electronics & Optics Track

EE 104 Bio-electronics & Bio-instrumentation
EE 115 Intro to MEMS Design
EE 130/L / 230 Optical Fiber Communication
EE 136 Engineering Electromagnetics (Strongly Recommended)
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 Nanocharacterization 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)
EE 173/L High Speed Digital Design
AMS 147 Computational Methods & Applications

Senior Design Project (Choose One)

EE129A Engineering Design Project I (● EE 171 and CE 100 and 185; permission of the Instructor) EE129B Engineering Design Project II (● EE129A and one of the following: EE 157, CE 118 or CE121; permission of the instructor) EE129C Engineering Design Project III (● EE129B)	EE 195 Senior Thesis (12 units; **and** students must take EE 157 or CE 118 to fulfill design experience) (● Department Approval)	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)

Exit Requirements:

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

* Preferred but students can substitute CMPS 12A/L or CMPS 5J and CMPS 11
** Students who complete 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.
† Satisfies the DC requirement

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Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

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

STUDENT'S NAME:

STAFF ADVISOR:

FACULTY ADVISOR: