## Electrical Engineering B.S. Degree 2017-2018 Curriculum Chart



## **Elective Requirements:**

(• EE 129B)

In addition to the above, EE majors must complete 4 additional upper-division courses (minimum of 3 courses from one track). Unlisted graduatelevel courses may be used to fulfill an elective requirement with prior department approval. Most, if not all, elective courses have additional prerequisites. They are subject to change frequently. Please visit <u>http://courses.soe.ucsc.edu/</u> to ensure you have met them.

Communications, Signals, Sy	stems & Controls	Electronics & Optics		
EE 130/L / 230 Optical Fiber Communication		EE 104 Bio-electronics & Bio-instrumentation		
EE 136 Engineering Electromagnetics (Strongly Recommended)		EE 115 Intro to MEMS Design		
EE 152 / 252 Intro to Wireless Signals/Sys	stems	EE 130/L / 230 Optical Fiber Communication		
EE 153 / 250 Digital Signal Processing		EE 136 Engineering Electromagnetics		
EE 154 / 241 Feedback Control Systems		EE 154 / 241 Feedback Control Systems		
EE 251 Principles of Digital Communication	ons	EE 157/L RF Hardware Design/Lab		
EE 253 Introduction to Information Theory		EE 172 / 221 Advanced Analog Integrated Circuits		
EE 261 Error Control Coding		EE 173/L High Speed Digital Design		
EE 262 Statistical Signal Processing		EE 175/L Energy Generation and Control		
EE 264 Image Processing and Reconstruct	ction	EE 176/L Energy Conversion and Control		
CMPF 118/L Intro to Mechatronics		FE 177/L Power Electronics		
CMPE 150/L Intro Computer Networks		EE 178 Device Electronics		
CMPE 251 Error-Control Coding		EE 180 J Advanced Renewable Energy Sources		
		EE 211 Introduction to Nanotechnology		
		EE 213 Nanocharacterization of Materials		
		EE 231 Optical Electronics		
		CMPE 118/L Intro to Mechatronics		
		CMPE 121/L Microprocessor System Design		
		CMPE 167/L Sensing and Sensor Technologies		
Senior Design Project (Choose El	E129B/C or EE195):	Exit Requirements:		
FF 129A Engineering Des	ian Project I	1 Complete an Exit Survey		
(• EE171; CE100/L) satisfies Ethics and 2 units of	of Communications in the Discipline	2. Attend on Exit Integriew with a designated EE faculty		
EE 129B Engineering Design Project II	EE 195 Senior Thesis	2. Meintein 2.5 surgestation CDA in all associated and alexing		
(●EE 129A and one of the following: EE157/L,	(● Department Approval)	5. Maintain a 2.5 cumulative GPA in all required and elective courses		
CE118/L, or CE121/L; instructor permission)	(10 units, & students must take	for the major, OR submit a Portfolio for Department Review, OR		
EE 129C Engineering Design Project III	design experience)	submit a Senior Thesis with Department Approval.		

## Electrical Engineering B.S. Degree 2017-2018 Curriculum Chart

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

Key Legend

• Course Prerequisite

% Students with no prior programming experience are strongly recommended to take course CMPE 3, CMPS 5J, CMPS 5P, CMPS 10 or equivalent before taking this class.

\* Preferred, but students can substitute with CMPS 12A/L or CMPS 5J and 11.

\*\* Students who complete Math 21 and Math 24 (or the equivalents) in lieu of AMS 10 & 20 are strongly encouraged to take the MATLAB self-paced tutorial prior to enrolling in EE 101/L.

\*\*\* Satisfies 1 unit of Communications in the Discipline

^ EE 80T recommended, but students can substitute EE 80T with CMPE 80H or TIM 80C.

Student Name:

Staff Advisor:

Faculty Advisor: