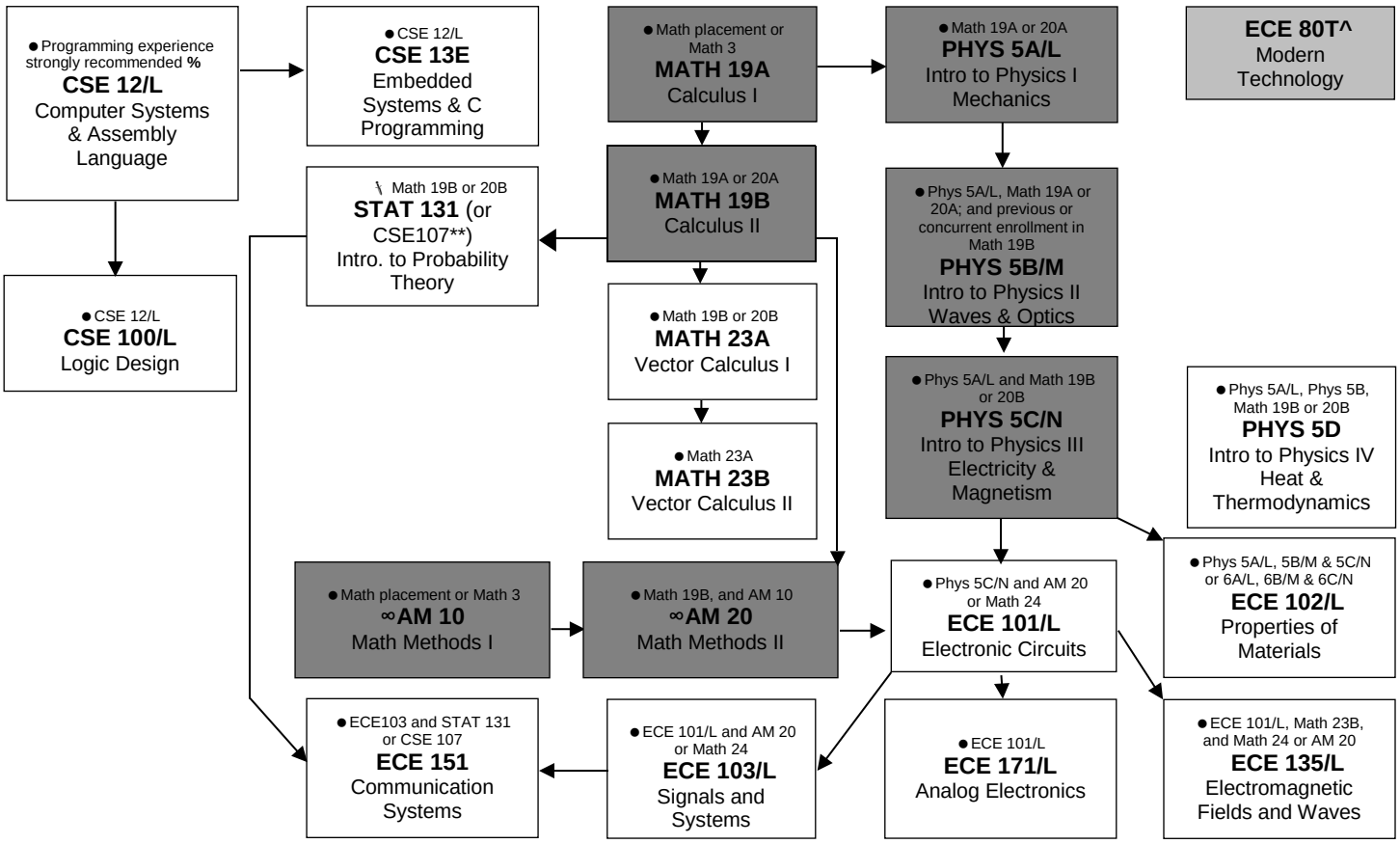
Electrical Engineering B.S. Degree
2019-2020 Curriculum Chart



Elective Requirements:
In addition to the above, Electrical Engineering majors must complete 4 additional upper-division 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 additional pre-requisites. They are subject to change frequently. Please visit http://courses.soe.ucsc.edu/ to ensure you have met them.**

Communications, Signals, Systems & Controls	Electronics & Optics
ECE 118/L Intro to Mechatronics	ECE 104 Bioelectronics
ECE 130/L / 230 Intro to Optoelectronics & Photonics	ECE 115 Introduction to Solid Mechanics
ECE 136 Engineering Electromagnetics *(Strongly Recommended)*	ECE 118/L Intro to Mechatronics
ECE 141 / 241 Feedback Control Systems	ECE 130/L / 230 Intro to Optoelectronics & Photonics
ECE 152 / 252 Intro to Wireless Communications	ECE 136 Engineering Electromagnetics
ECE 153 / 250 Digital Signal Processing	ECE 141 / 241 Feedback Control Systems
ECE 237 Image Processing and Reconstruction	ECE 157/L RF Hardware Design/Lab
ECE 251 Principles of Digital Communications	ECE 167/L Sensing and Sensor Technologies
ECE 253 Introduction to Information Theory	ECE 172 / 221 Advanced Analog Integrated Circuits
ECE 255 Error Control Coding	ECE 173/L High Speed Digital Design
ECE 256 Statistical Signal Processing	ECE 175/L Energy Generation and Control
CSE 150/L Intro Computer Networks	ECE 176/L Energy Conversion and Control
	ECE 177/L Power Electronics
	ECE 178 Device Electronics
	ECE 180J Advanced Renewable Energy Sources
	ECE 201 Introduction to Nanotechnology
	ECE 203 Nanocharacterization of Materials
	ECE 231 Optical Electronics
	CSE 121/L Microprocessor System Design

Senior Design Project (Choose ECE129BC or ECE 129A & ECE195):

ECE 129A Engineering Design Project I
(● ECE171, CSE100 and one of the following: ECE157/L, ECE 118/L, CSE 121/L or instructor permission)

ECE 129B Engineering Design Project II
(● ECE 129A)
ECE 129C Engineering Design Project III
(● ECE 129B)

ECE 195 Senior Thesis
(● ECE 129A)
(10 units, & students must take ECE157/L or ECE118/L or ECE 115 to fulfill design experience)

Exit Requirements:

1. Exit Survey https://undergrad.soe.ucsc.edu/exit-survey
2. Exit Interview with a designated ECE faculty
3. Maintain a 2.5 cumulative GPA in all required and elective courses for the major, OR submit a Portfolio for Department Review, OR submit a Senior Thesis with department approval.

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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 CSE 3, CSE 5J, CSE 20, CSE 10 or equivalent before taking this class.
** Requires additional pre-requisites
^ This course is waived for Transfer students.
∞ AM 10 can be substituted by MATH 21. AM 20 can be substituted by MATH 24.

Student Name:

Staff Advisor:

Faculty Advisor: