

Robotics Engineering B.S. Degree 2016-2017 Curriculum Chart

Math Courses

MATH 19A
Calculus I

MATH 19B
Calculus II

MATH 23A
Multivariable
Calculus

EE 103/L
Signals &
Systems

CMPE 8**
Robot Automation

CMPE 16
Discrete Math

CMPE 107
Probability &
Statistics

AMS 10*
Engr. Math
Methods I
or
MATH 21
Linear Algebra

AMS 20
Engr. Math
Methods II

** Strongly recommended
** Not required, but strongly recommended for frosh.*

Programming

CMPE 12/L
Computer Systems &
Assembly Language

CMPE 13/L
Computer Systems &
C Programming

CMPS 12B/M
Data Structures

CMPS 101
Abstract Data Types
& Algorithms

Science Courses

PHYS 5A/L
Mechanics

CMPE 9
Intro. to Statics,
Dynamics &
Biomechanics

PHYS 5C/N
Electricity & Magnetism

CMPE 10
Fundamentals of Robot
Kinematics &
Dynamics

Digital Electronics

CMPE 100/L
Logic Design

EE 101/L
Electronic Circuits

CMPE 121/L
Microprocessor
System Design

Robotics

CMPE 118/L
Intro to Mechatronics

**Advanced Robotics
Elective**

CMPE 141
Feedback Control
Systems

CMPE 167/L
Sensing & Sensor
Technologies

Breadth

CMPE 185#
Technical Writing

Elective*

** Electives can be an upper division
or graduate course from Approved
List on the back.
Satisfies the DC requirement*

Capstone

CMPE 129A, 129B, & 129C
Capstone Project I, II, & III

or

**CMPE 129A
&
CMPE 195: Senior Thesis
&
Submission of approved thesis**

Exit Requirements

1. Portfolio <https://www.soc.ucsc.edu/departments/computer-engineering/undergraduate/undergraduate-portfolio>
2. Exit Survey <https://ua.soc.ucsc.edu/exit-survey>
3. Exit Interview

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Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Approved List of Upper Division Electives

Please refer to the Undergraduate Advising website for the list of approved courses

Approved List of Advanced Robotic Electives

Please refer to the Undergraduate Advising website for the list of approved courses

Notes:

- The School of Engineering has different major declaration deadlines than the UCSC Academic/Administrative calendar. Our deadlines and process can be found on: <https://ua.soc.ucsc.edu/declare-your-major>
- All students admitted to a School of Engineering major, or seeking admission to a major, must take all courses required for that major for a letter grade.
- Courses in which you receive a grade of C-, D+, D, or D- earn credit toward graduation, but cannot be used to satisfy a major requirement or a general education requirement, and cannot satisfy a prerequisite for another course.
- In addition to this list, any 5-unit CE, CS, or EE graduate course (200+) may also be used as an elective.
- At most, only one elective may be substituted by an upper-division individual or field study (CMPE, CMPS, EE 193 or 198) with approval.

Student Name:

Staff Advisor:

Faculty Advisor:

I have discussed the BS/MS program with my advisor.