Computer 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 16
Discrete Math

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

AMS 20
Engr. Math Methods II

CMPE 107
Probability & Statistics

* Strongly recommended

Core Courses

CMPE 12/L
Computer Systems & Assembly Lang.

CMPE 13/L
Computer Systems & C Programming

CMPE 100/L
Logic Design

CMPE 121/L
Microprocessor System Design

CMPE 185 #
Technical Writing

CMPE 110
Computer Architecture

CMPS 12B/M
Data Structures

CMPS 101
Algorithms & Abstract Data Types

EE 101/L
Electronic Circuits

Science Courses

PHYS 5A/L
Mechanics

PHYS 5B/M
Waves & Optics
or
CMPE 9*
Statics, Dynamics, & Biomechanics

PHYS 5C/N
Electricity & Magnetism

* CMPE 9 is recommended for the Robotics & Control concentration

Concentrations (choose one)

Systems Programming

CMPS 111
Operating Systems

CMPS 109
Advanced Programming
or
CMPS 115
Software Engineering

CMPE 150/L
Intro to Comp. Networks

One of the following:
- CMPS 104A
- CMPE 113
- CMPE 156/L

Elective*

Robotics & Control

Two of the following:
- CMPE 118/L
- CMPE 141
- CMPE 167/L

Third course from above or an Approved Robotics Elective (see back)

Elective*

Computer Systems

CMPS 111
Operating Systems

CMPE 125/L
Logic Design w/ Verilog
or
CMPE 122
Intro to VLSI Digital System Design

CMPS 109
Advanced Programming
or
CMPS 115
Software Engineering

Elective*

Networks

CMPE 150/L
Intro to Comp. Networks

CMPE 156/L
Network Programming

CMPS 111
Operating Systems

CMPE 151/L
Advanced Networks
or
Elective*

Digital Hardware

CMPE 125/L
Logic Design w/ Verilog

EE 171/L
Analog Electronics

One of the following:
- CMPE 122
- CMPE 202
- CMPE 222
- EE 173/L**

Elective*

*Electives can be an upper division or graduate course from Approved List on the UA website
**EE 173 requires the prerequisite EE 174

Capstone

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

or

CMPS 115, 116, & 117
Software Capstone Project I, II, & III

or

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

Exit Requirements
1. Portfolio
2. Exit Survey
3. Exit Interview

See back for more info

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

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 electives

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

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.soe.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.