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
- MATH 21: Linear Algebra
- AMS 20: Engr. Math Methods II
- CMPE 107: Probability & Statistics

Core Courses
- CMPE 12/L: Computer Systems & Assembly Lang.
- CMPE 121/L: Microprocessor System Design
- CMPS 12B/M: Data Structures
- CMPE 13/L: Computer Systems & C Programming
- CMPE 185 #: Technical Writing
- CMPE 110: Computer Architecture
- 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

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
- 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)
- Computer Systems
  - CMPS 111: Operating Systems
  - CMPE 125/L: Logic Design w/ Verilog
  or
  - CMPE 122: Intro to VLSI Digital System Design
- Networks
  - CMPE 150/L: Intro to Comp. Networks
  - CMPE 156/L: Network Programming
  - CMPS 111: Operating Systems
- 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**:

Electives
- Elective*
- Elective*
- 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
- CMPS 115, 116, & 117: Software Capstone Project I, II, & III
- 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

https://ua.soe.ucsc.edu • advising@soe.ucsc.edu • (831) 459-5840 • 11/3/2016
Computer Engineering B.S. Degree  
2016-2017 Curriculum Chart

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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.