## Computer Engineering B.S. Degree
### 2014-2015 Curriculum Chart

### Math Courses
- **MATH 19A**
  - Calculus I
- **MATH 19B**
  - Calculus II
- **MATH 23A**
  - Multivariable Calculus
- **EE 103/L**
  - Signals & Systems

### Science Courses
- **PHYS 5A/L**
  - Mechanics
- **PHYS 5B/M**
  - Waves & Optics
  - **or**
  - CMPE 9*
  - Statics, Dynamics, & Biomechanics
- **PHYS 5C/N**
  - Electricity & Magnetism

### Core Courses
- **CMPE 12/L**
  - Computer Systems & Assembly Lang.
- **CMPE 121/L**
  - Microprocessor System Design
- **CMPE 13/L**
  - Computer Systems & C Programming
- **CMPE 100/L**
  - Logic Design
- **CMPE 110**
  - Computer Architecture
- **CMPE 185#**
  - Technical Writing

### Ethics: (Choose one)
- CMPE 80E
- BME 80G (also PHIL 80G or CHEM 80G)
- PHIL 22
- PHIL 24
- PHIL 28

### Concentrations (choose one)
- **Systems Programming**
  - CMPS 111
    - Operating Systems
  - CMPS 115
    - Software Engineering
  - CMPE 150/L
    - Intro to Comp. Networks
  - Elective*

- **Robotics & Control**
  - CMPS 111
    - Operating Systems
  - CMPE 109
    - Advanced Programming
  - CMPS 115
    - Operating Systems
  - Elective*

- **Computer Systems**
  - CMPE 12/L
    - Computer Systems & Assembly Lang.
  - CMPE 100/L
    - Logic Design
  - CMPE 125/L
    - Logic Design w/ Verilog
  - CMPE 150/L
    - Intro to Comp. Networks
  - CMPE 151/L
    - Advanced Networks
  - Elective*

- **Networks**
  - CMPS 111
    - Operating Systems
  - CMPE 156/L
    - Network Programming
  - CMPE 115/L
    - Operating Systems
  - Elective*

- **Digital Hardware**
  - CMPE 125/L
    - Logic Design w/ Verilog
  - CMPE 156/L
    - Network Programming
  - EE 171/L
    - Analog Electronics
  - One of the following:
    - CMPE 122
    - CMPE 202
    - CMPE 222
    - EE 173/L
  - Elective*

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

Or
- **CMPE 129A**
  - **or**
  - CMPE 195: Senior Thesis
  - Submission of approved thesis

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*Strongly recommended*

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

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[http://ua.soe.ucsc.edu • advising@soe.ucsc.edu • (831) 459-5840 • 08/12/2014](http://ua.soe.ucsc.edu • advising@soe.ucsc.edu • (831) 459-5840 • 08/12/2014)
# Computer Engineering B.S. Degree
## 2014-2015 Curriculum Chart

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## Approved List of Upper Division Electives

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### NOTES:
- ♦ Requires prior approval.
- 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.

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Student Name: 

Staff Advisor: 

Faculty Advisor: 

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

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