

# Network & Digital Technology B.A. Degree 2016-2017 Curriculum Chart

## Math Courses

**MATH 19A**  
Calculus I

**MATH 19B**  
Calculus II

**AMS 10\***  
Engr. Math Methods  
I

or

**MATH 21**  
Linear Algebra

**AMS 20\***  
Engr. Math Methods  
II

or

**MATH 24**  
Differential  
Equations

**MATH 23A**  
Vector Calculus

**CMPE 16**  
Discrete Math

\* *AMS 10 & 20 are strongly preferred.* Students who complete Math 21 & 24 (or the equivalents) in lieu of AMS 10 & 20 are strongly encouraged to either take the MATLAB self-paced tutorial: <http://matlab-training.soe.ucsc.edu>, or CMPE 8, prior to enrolling into EE 101/L.

## Science Courses

**PHYS 5A/L or 6A/L**  
Mechanics

**PHYS 5C/N or 6C/N**  
Electricity & Magnetism

## Core Courses

**CMPE 12/L**  
Computer  
Systems &  
Assembly Lang.

**CMPE 13/L**  
Computer  
Systems & C  
Programming

**CMPS 12B/M**  
Data Structures

**CMPE 100/L**  
Logic Design

**CMPE 150/L**  
Intro to Computer  
Networks

**CMPE 185#**  
Technical Writing

**CMPS 101**  
Algorithms &  
Abstract Data  
Types

or

**EE 101/L**  
Electronic Circuits

# Satisfies the DC requirement.

## Electives

Choose from Approved List of Upper Division Electives from the back.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## Capstone

Students must pass one of the capstone courses (listed below), in addition to the three upper-division electives.

**CMPS 115**  
Software  
Engineering

**CMPE 118/L**  
Intro to Mechatronics

**CMPE 121/L**  
Microprocessor  
System Design

**CMPE 125/L**  
Logic Design with  
Verilog

**CMPE 151/L**  
Advanced Networks

**CMPE 156/L**  
Network  
Programming

## 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>

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Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

**Elective Choices (we can also provide URL for list of approved electives for CMPE majors)**

Students wishing to focus on digital technology should consider including among their courses: EE 101/L, CMPE 110, CMPE 118/L, CMPE 121/L, and CMPE 125/L.

Students wishing to focus on network technology should consider including among their courses: CMPS 101, CMPE 151/L, CMPE 156/L, and CMPS 111.

In all cases, students should discuss their interests and elective choices with a faculty adviser.

**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.
- A single course may not satisfy multiple major requirements.

Student Name:
Staff Advisor:
Faculty Advisor: