Network & Digital Technology B.A. Degree
2020-2021 Curriculum Chart

Math Courses

MATH 19A
Calculus I

AM 10* **AND** **AM 20***
Engr. Math Methods I   Engr. Math Methods II

OR

MATH 19B
Calculus II

MATH 21 **AND** **MATH 24**
Linear Algebra   Differential Equations

MATH 23A
Vector Calculus **OR** **AM 30** Multivariate Calculus for Engineers

***CSE 16**
Discrete Math
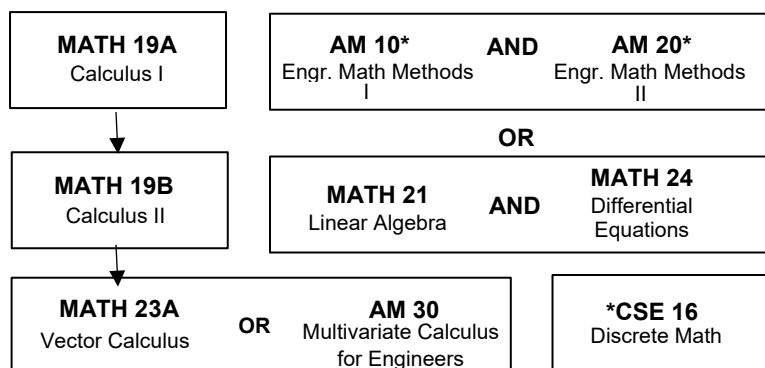
* AM 10 & 20 are strongly preferred. Students who complete Math 21 & 24 (or the equivalents) in lieu of AM 10 & 20 are strongly encouraged to either take the MATLAB self-paced tutorial: http://matlab-training.soe.ucsc.edu,
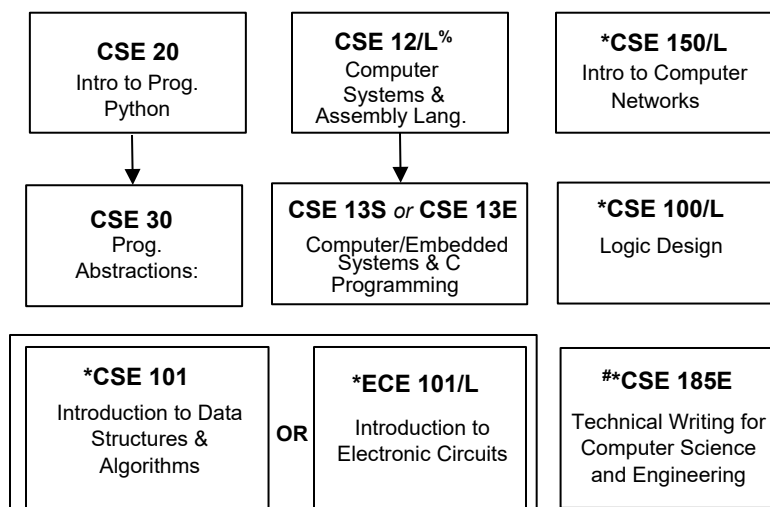
Science Courses

PHYS 5A/L or 6A/L
Mechanics

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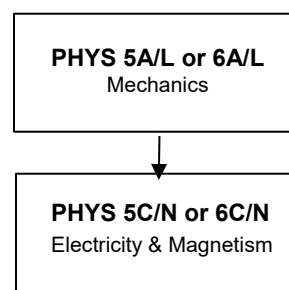
Electives

Choose from Approved List of Upper Division Electives that can be found at:
https://undergrad.soe.ucsc.edu/network-and-digital-technology-electives

1. _____

2. _____

3. _____

Core Courses

CSE 20
Intro to Prog. Python

CSE 12/L %
Computer Systems & Assembly Lang.

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

CSE 30
Prog. Abstractions:

CSE 13S *or* **CSE 13E**
Computer/Embedded Systems & C Programming

***CSE 100/L**
Logic Design

***CSE 101**
Introduction to Data Structures & Algorithms
OR
***ECE 101/L**
Introduction to Electronic Circuits

#*CSE 185E
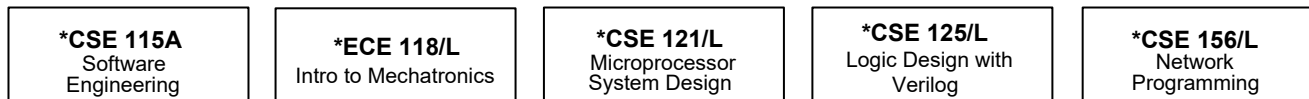Technical Writing for Computer Science and Engineering

 # Satisfies the DC requirement.

*   Check catalog course descriptions for prerequisites

% Students with no prior programming experience are strongly recommended to take course CSE 20 or equivalent before taking this class.

Capstone

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

***CSE 115A**
Software Engineering

***ECE 118/L**
Intro to Mechatronics

***CSE 121/L**
Microprocessor System Design

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

***CSE 156/L**
Network Programming

Exit Requirements

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

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Elective Choices: https://undergrad.soe.ucsc.edu/network-and-digital-technology-electives

Students wishing to focus on digital technology should consider including among their courses: CSE 120, CSE 121/L, CSE 125/L, ECE 101/L, ECE 118/L

Students wishing to focus on network technology should consider including among their courses: CSE 101, CSE 130^, CSE 131^, CSE 151/L, and CSE 156/L

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

^**Students can only use either CSE 130 or CSE 131 to satisfy an elective.**

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://undergrad.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.
- At most, only one elective may be substituted by an upper-division individual or field study (CSE, ECE 193 or 198) with approval. Approval is determined by the department via Course Substitution Petition.
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  A single course may not satisfy multiple major requirements.

Student Name:
Staff Advisor:
Faculty Advisor: