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

Math Courses

MATH 19A
Calculus I

AM 10*
Engr. Math Methods I

AND

AM 20*
Engr. Math Methods II

OR

MATH 19B
Calculus II

MATH 21
Linear Algebra

AND

MATH 24
Differential Equations

OR

MATH 23A
Vector Calculus

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. ______________________

* 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.

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 135 or CSE 13E
Computer/Embedded Systems & C Programming

*CSE 100/L
Logic Design

*CSE 101
Introduction to Data Structures & Algorithms

*ECE 101/L
Introduction to Electronic Circuits

*ECE 185E
Technical Writing for Computer Science and Engineering

# Satisfies the DC requirement.

CSE 20
Intro to Prog. Python

CSE 12/L *
Computer Systems & Assembly Lang.

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*ECE 185E
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# Satisfies the DC requirement.

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

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

Student Name:

Staff Advisor:

Faculty Advisor:

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