

CATALOG YEAR: 2021-2022 Degree: BSCmpE

**MAJOR:** Computer Engineering

The major map illustrates one path to completing your major, based on faculty members' advice on course sequence and course schedule. This document provides general direction.

Course	Cr. Hrs.		Course	Cr. Hrs.
FIRST YEAR				
Semester: Fall Total Credit F	ours: 15 S		Semester: Spring Total Credit	Hours: 15
ECE 1020 Connections to ECE	1		CSC 1300 Intro to PS & Comp Programs	4
MATH 1910 Calculus I	4		MATH 1920 Calculus II	4
CHEM 1110 General Chemistry I	4		PHYS 2110 Cal Based Physics I	4
ENGL 1010 Writing Composition I	3		ENGL 1020 Writing Composition II	3
Social/Behavioral Science Elective	3			
Course	Cr. Hrs.		Course	Cr. Hrs.
SOPHOMORE YEAR				
Semester: Fall Total Credit Hours: 17			Semester: Spring Total Credit	Hours: 18
ECE 2010 Electrical Circuits I	3		ECE 2001 Computer Aided Engineering	1
ECE 2011 Electrical Engineering Lab I	1		ECE 2110 Intro to Digital Systems	3
CSC 1310 Data Structures & Algorithms	4		ECE 2020 Electrical Circuits II	3
MATH 2120 Differential Equations	3		CSC 2400 Design of Algorithms	3
MATH 2010 Intro to Linear Algebra	3		MATH 2110 Calculus III	4
ENGL 2130, 2235, or 2330 Lit.	3		PHYS 2120 Calculus Based Physics II	4
Course	Cr. Hrs.		Course	Cr. Hrs.
JUNIOR YEAR				
Semester: Fall Total Credit Hours: 16			Semester: Spring Total Credit	Hours: 16
ECE 3010 Signals and Systems	3		ECE 3020 Dis-Time Signals & Systems	3
ECE 3060 Electrical Engineering Lab II	1		ECE 3920 Professional Issues in ECE	1
ECE 3130 Microcomputer Systems	4		ECE 4140 Embedded System Design	3
ECE 3160 Digital Systems Lab	1		CSC 4200 Computer Networks	3
ECE 3300 Electronics I	3		MATH 3470 Intro to Prob and Statistics	3
CSC 2500 Unix Lab	1		Humanities/Fine Arts Elective	3
COMM 2025 or PC 2500 Communication	3			
Course	Cr. Hrs.		Course	Cr. Hrs.
SENIOR YEAR				
Semester: Fall Total Credit	Hours: 15		Semester: Spring Total Credit	Hours: 17
ECE 4110 Digital System Design	3		ECE 4120 Fund of Computer Design	3
ECE 4961 Capstone Design I	3		ECE 4971 Capstone Design II	3
EE Elective <sup>2</sup>	3		CSC 4100 Operating Systems	3
CS Elective <sup>1</sup>	3		CmpE Elective <sup>3</sup>	5
Social/Behavioral Science Elective	3		Humanities/Fine Arts Elective	3

## Notes:

- 1. CS Electives: CSC 2310, CSC 3020, CSC 3300, CSC 3340, CSC 3350, CSC 4010, CSC 4020, CSC 4240, CSC 4400, CSC 4450, CSC 4575, CSC 4610, CSC 4710, CSC 4750, or CSC 4760
- 2. EE Electives:
  - a. ECE 3210, ECE 3310, ECE 3510, ECE 3540, ECE 3610, ECE 3710, or
  - b. any ECE 4000 level course except ECE 4931, ECE 4932, and ECE 4933
- 3. CmpE Electives: ECE 3260, ECE 3270, ECE 3360, ECE 3560, ECE 3660, ECE 3760, ECE 4931, ECE 4932, ECE 4933, MATH 3400, MATH 3810, MATH 4210, MATH 4250, MATH 4510, MATH 4710, PHYS 2420, PHYS 2920, or any of the CS/EE Elective list above
- 4. Only one of CSC 3020 and MATH 4210 can be taken, laboratory and other one credit courses may not be taken for elective credit; lectures that include laboratory work may be taken for EE, CS, or CmpE elective credit
- 5. Individual study, individual problems, individual projects, design projects, recitation, seminar, thesis, and similar courses may not be taken for elective credit