

Bachelor of Science in Computer Engineering (BSCmpE) Degree
Department of Electrical and Computer Engineering

Overall major GPA minimum 2.0 required.

All courses used to satisfy a General Education requirement must be completed with a grade of C- or better.

Course sequencing follows the academic year, and assumes beginning the program in the fall semester.

The math and physics departments require a C or better in some pre-requisite courses.

For more information, visit the ECE Department website.

Effective: Fall 2025

P = Prerequisite, C = Co-requisite, DC = Design Content

1 st semester 15 credits	MA 16500 (4) P: MA 15400 or MA 15900 (C- or better), or placement GE : A3	CHM 11500 (4) P: CHM 11100 or 1 yr. H.S. C: MA 15400 GE: B4	ENGR 12700 (4) C: MA 16500	ENGL 13100 (3) P: ENGL 12900 with C or better or placement GE: A1		
	Anlytc Geomtry&Calc I	General Chemistry	Engineering Fund I	Elem Composition I		
2 nd semester 16 credits	MA 16600 (4) P: MA 16500 (C- or better) GE : A3	PHYS 15200 (5) C: MA 16600 GE: B4	ENGR 12800 (4) P: ENGR 12700 (C- or better) C: MA 16500 C: ENGL 13100 or COM 11400	COM 11400 (3) GE: A2		
	Anlytc Geomtry&Calc II	Mechanics	Engineering Fund II	Fundament Of Speech		
3 rd semester 16 credits	MA 26100 (4) P: MA 16600 (C- or better)	PHYS 25100 (5) P: PHYS 15200 (C or better) C: MA 26100	ECE 20100 (3) C: MA 26100	ECE 27000 (4) C: ENGR 12800 or equivalent course of computer programming DC		
	Multivariate Calculus	Heat Electricity & Optics	Linear Circuit Anly I	Intro Digitt Sys Desgn		
4 th semester 16 credits	MA 35100 (3) P: MA 16600 (C- or better)	MA 36300 (3) P: MA 26100 or MA 26300 (C- or better) C: MA 35100 (C- or better) or current enrollment in MA 35100	ECE 20200 (3) P: ECE 20100 C: MA 36300 DC	ECE 20700 (1) P: ECE 20100	ECE 22900 (3) P: ENGR 12800 or equivalent course of computer programming	ECE 23000 (3) P: ENGR 12800 or equivalent course of computer programming
	Elem Linear Algebra	Differential Equations	Linear Circuit Anly II	Measure & Instrumentn	C Programming for ECE	Engineering Data Analysis in Python
5 th semester 16 credits	ECE 25500 (3) P: ECE 20100, CHM 11500 DC	ECE 30100 (3) P: ECE 20200	ECE 35800 (3) P: ECE 27000, ECE 22900 DC	ECE 36200 (4) P: ECE 27000, ECE 20700, ECE 22900 DC	ECE 36800 (3) P: ECE 23000 DC	
	Intr Electron Anly Des	Signals And Systems	Intro To VHDL	Micropro Sys & Infrac	Data Structures	
6 th semester 16 credits	MA 17500 (3)	ECE 20800 (1) P: ECE 20700 P: ECE 25500 DC	ECE 30200 (3) P: MA 36300 C: ECE 30100	ECE 46500 (3) P: ECE 36200	General Education Elective (3) B6 with all outcomes	General Education Elective (3) B7
	Discrete Math	Electron Dev & Des Lab	Probabilistic Methods	Embedded Micro		
7 th semester 16 credits	ECE 40500 (3) Senior program standing DC	ECE 48500 (4) P: ECE 36200 MA 17500 or MA 27500 C: ECE 36800 DC	Group 1 or 2: Technical Elective (3)	Group 1 or 2: Technical Elective (3)	General Education Elective (3) B5 with all outcomes	Civics Literary Requirements
	Sr Engineering Des I	Embedd Real-Time OS				
8 th semester 16 credits	ECE 40601 (2) P: ECE 40500 C: ECE 40602 DC	ECE 40602 (1) C/P: ECE 20100	ECE 43700 (4) P: ECE 36200, ECE 35800 DC	Group 1: Technical Elective (3)	Group 1 or 2: Technical Elective (3)	General Education Elective (3) B8
	Sr Engineering Des II	ECE Seminar	Computer Des & Prototyp			

Revised: October 2024

* **MA 17500:** P: MA 16500 or (MA 15300 and CS 16000) or (MA 15300 and EET 26400) with a grade of C- or higher in each course.

Program Standing:

90 credits (including ECE 36200) = Senior; 60 credits = Junior; 30 credits (including PHYS 15200) = Sophomore