

COMPUTER ENGINEERING (B.S.)

Curriculum Map

Course	Title	Hours
Freshman		
Fall		
CSC 118	COMPUTER SCIENCE I	3
ECE 101	Introduction to Electrical and Computer Engineering	2
ENG 104 or ENG 103 or ENG 111	COMPOSITION I or English Composition I with Co-requisite Support or COMPOSITION & LITERATURE FOR L	3
MATH 241	CALCULUS I WITH LABORATORY	3
UNIV 100	UNIVERSITY SUCCESS	2
Humanities & Fine Arts Option		3
Hours		16
Spring		
ECE 212 & ECEL 212	DIGITAL LOGIC and DIGITAL LOGIC LABORATORY	4
ENG 105 or ENG 112	COMPOSITION II or COMPOSITION	3
MATH 242	CALCULUS II WITH LABORATORY	3
PHY 211 & PHYL 211	General Physics I and GENERAL PHYSICS LAB I	4
Pathway Option		3
Hours		17
Sophomore		
Fall		
CSC 119	COMPUTER SCIENCE II	3
ECE 220 & ECEL 220	CIRCUIT THEORY and CIRCUITS LABORATORY	4
MATH 243	CALCULUS III WITH LABORATORY	3
PHY 212 & PHYL 212	General Physics II and GENERAL PHYSICS LAB II	4
Pathway Option		3
Hours		17
Spring		
ECE 312	COMPUTER ORGANIZATION & DESIGN	3
ECE 330 & ECEL 330	ELECTRONICS and ELECTRONICS LABORATORY	4
ECE 252	ENGINEERING ANALYSIS	3
MATH 244	CALCULUS IV WITH LABORATORY	3
UNIV 200	CIVIC ENGAGEMENT	1
Pathway Option		3
Hours		17
Junior		
Fall		
CIV 222	ENGINEERING MECHANICS I	3
CSC 225	DISCRETE STRUCTURES	3
ECE 315	SYNTHESIS WITH HARDWARE DL	3
ECE 360 & ECEL 360	EMBEDDED MICROPROCESSOR SYSTEM and MICROPROCESSOR LABORATORY	4
MATH 368	DIFFERENTIAL EQUATIONS	3
Hours		16
Spring		
CIV 355	ENGINEERING ECONOMY	3
CSC 228	DATA STRUCTURES & ALGORITHMS	3
ECE 351	SIGNALS AND SYSTEMS	3
ECE 412	COMPUTER ARCHITECTURE	3

MATH 307	PROBLY & STATISTICS/ENGINEERG	3
Hours		15
Senior		
Fall		
CHEM 141 & CHML 141	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LAB	4
CSC 325	OPERATING SYSTEMS	3
ECE 490	SENIOR DESIGN PROJECTS I	3
Technical Elective I		3
Humanities & Fine Arts Option		3
Hours		16
Spring		
ECE 491	SENIOR DESIGN PROJECTS II	3
Technical Elective II		3
Technical Elective III		3
Social & Behavioral Science Option		3
Hours		12
Total Hours		126

Notes:

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Students are required to take the Mathematics Placement Test to determine if they need to take any math courses before taking MATH 241 CALCULUS I WITH LABORATORY (C).
- Online Graduation Clearance (**to be completed during the graduating semester only**).

Code	Title	Hours
Technical Electives		
Students must choose nine (9) hours of technical electives from the following list of courses:		
ECE 345	ELECTROMAGNETIC FIELDS	3
ECE 430	DIGITAL VLSI DESIGN	3
ECE 431	Digital System Testing and Design for Testability	3
ECE 440	COMMUNICATION SYSTEMS	3
ECE 451	DIGITAL SIGNAL PROCESSING	3
ECE 492	SPCL STDS N ELEC & COMPU ENGIN	3
ECE 493	SPCL TPCS N ELECTRL & COMPU EN	3
Other courses require Chair's approval		
Total Hours		21