SCHOOL OF ENGINEERING AND COMPUTING

Electrical and Computer Engineering

The minimum number of credit hours for the Bachelor of Science in Electrical and Computer Engineering is 132

Freshman (First Year)

First Semester			Second Semester		
AIU 100	The AIU Experience (EX)	1	AIU 111/112	Wellness (WL)	1
EGR 100	Design in Engineering	3	CHM 110	General Chemistry I	3
ENG 101	College Writing (EC)	3	CHM 111	General Chemistry I Laboratory	1
MAT 121	Calculus I	4	GenEd	CS Course	3
PHY 120	Physics I (NS)	3	MAT 122	Calculus II	4
PHY 121	Physics I Laboratory (NS)	1	PHY 122	Physics II (NS)	3
Total Credit Hours		**15**	PHY 123	Physics II Laboratory (NS)	1
			Total Credit Hours		**16**

Sophomore (Second Year)

First Semester			Second Semester		
CSC 102	Intro to Programming	3	ECE 260	Digital Logic Design	3
ECE 200	Electrical Circuits I	3	ECE 261	Digital Logic Design Laboratory	1
ECE 201	Electrical Circuits I Laboratory	1	ECE 300	Electrical Circuits II	3
EGR 150	Probability & Statistics in Engineering (MA)	3	ECE 301	Electrical Circuits II Laboratory	1
PHL 112	Professional Ethics (AH)	3	ECE 220	Introduction to data Structure & Algorithm	3
MAT 221	Calculus III	4	ENG 301	Technical Writing (EC)	3
			MAT 230	Differential Equations and Matrix Algebra	4
Total Credit Hours		**17**	**Total Credit Hours**		**18**

Junior (Third Year)

First Semester			Second Semester		
ECE 263	Microcomputers	3	AIU 300	Internship & Career Preparation (EX)	1
ECE 264	Microcomputers Laboratory	1	ECE 350	Electronics II	3
ECE 320	Electronics I	3	ECE 351	Electronics II Laboratory	1
ECE 330	Linear Systems and Signals	3	ECE 447	Control Systems	3
ECE 361	Electromagnetics	3	ENG 302	Technical Presentations	3
ECE 394	Electrical Engineering Seminar	2	Engineering Technical Elective		3
EGR 250	Numerical Methods Using MATLAB	3	ECO 201	Principles of Microeconomics	3
Total Credit Hours		**18**	**Total Credit Hours**		**17**
			Summer Semester - EGR 490 Internship		**1**

Senior (Fourth Year)

First Semester			Second Semester		
ECE 410	Power Systems	3	ECE 400	Communication Theory	3
ECE 420	Digital Signal Processing	3	ECE 496	Senior Design Project II	3
ECE 494	Senior Design Project 1	3	GenEd	SS course	3
GenEd	AH course	3	Specialization Course 2		3
	Specialization Course 1	3	Specialization Course 3		3
Total Credit Hours		**15**	**Total Credit Hours**		**15**

This is a recommended study plan for the Bachelor of Science in Electrical and Computer Engineering.
Please see the 2026-2027 Undergraduate Catalog for a complete explanation of degree requirements.

