

ELECTRICAL ENGINEERING – Electrical Track

1 st Year	Session	Course	Course Name	SH	P: Prerequisite; C: Corequisite
	F/S	Math:1550	Engineering Math I: Single Variable Calculus	4	P: MPT Level 3 score of 9 or higher or ALEKS score of 75
	F	ENGR:1100	Introduction to Engineering Problem-Solving	3	
	ALL	CHEM:1110	Principles of Chemistry I	4	
	ALL	RHET:1030	Rhetoric	4	
	F	ENGR:1000	Engr Success for First Year Students	1	First Semester Standing
Total				16	
	F/S	MATH:1560	Engineering Math II: Multi-Variable Calculus	4	P:MATH:1550
	F/S	ENGR:1300	Introduction to Engineering Computing	3	C:MATH:1550
	ALL	PHYS:1611	Introductory Physics I	4	C:MATH:1550
	ALL	MATH:2550	Engineering Math III: Matrix Algebra	2	P: MATH:1550
	ALL		General Education Component #1	3	
2nd Year				TOTAL	16
	ALL	MATH:2560	Engineering Math IV: Differential Equations	3	P:MATH:1560;MATH:2550
	F/S	PHYS:1612	Introductory Physics II	4	P:PHYS:1611; C:MATH:1560
	ALL	ENGR:2110	Engineering Fundamentals I:Statics	2	P:MATH:1550;C:MATH1560; C:PHYS:1611
	F/S	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3	C:MATH:2560
	ALL	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3	P:CHEM:1110; PHYS:1611 C:MATH:1560
Total				15	
	F/S	MATH:3550	Engineering Math V: Vector Calculus	3	P: MATH:2560(22M:034)
	F/S	ECE:2400	Linear Systems I	3	P: ENGR:2120; MATH:2560
	F/S	ECE:2410	Principles of Electronic Instrumentation	4	P: PHYS:1612; ENGR:2120; MATH:2560
	ALL	ENGR:2730	Computers in Engineering	3	P: ENGR:1300
	ALL		General Education Component #2	3	
3rd Year				Total	16
	F/S	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	P:MATH:1560
	F	ECE:3320	Intro to Digital Design	3	Sophomore Status
	F	ECE:3400	Linear Systems II	3	P:ECE:2400
	F	ECE:3410	Electronic Circuits	4	P: ECE:2400; ECE:2410
	F	ECE:3700	Electromagnetic Theory	3	P: MATH:3550; PHYS:1612
	F	ECE:3000	Professional Seminar: Electrical Engineering	1	Junior Status
Total				17	
	S	ECE:3500	Communication Systems	3	P:ECE:2400;
	S	ECE:3600	Control Systems	3	P:ECE:2400
	S	ECE:3720	Semiconductor Devices	3	P:PHYS:1612; ECE:3410
	F/S	ECE:3360	Embedded Systems (EFA #1)	3	P: ENGR:2730, ECE:3320. C: ECE:2410.
	ALL		Elective Focus Area #2	3	
	ALL		General Education Component #3	3	
4th Year				Total	18
	F/S	ECE:4880	Principles of ECE Design	3	Senior Status; P: ECE:2410; ENGR:2730
	ALL		Elective Focus Area #3	3	
	ALL		Elective Focus Area #4	3	
	ALL		Track Breadth Elective*	3	
	ALL		General Education Component #4	3	
Total				15	
	F/S	ECE:4890	Senior ECE Design	3	Senior Status P:ECE:4880 and 3 of: ECE:3330, ECE:3350, ECE:3360, ECE:3400, ECE:3410, ECE:3500, ECE:3600, CS:3330
	ALL		Depth Elective**	3	
	ALL		Elective Focus Area #5	3	
	ALL		Elective Focus Area #6	3	
	ALL		General Education Component #5	3	
Total				15	

* The track breadth elective must be chosen from among the following courses: CS:2210 (Discrete Structures), CS:2230 (Computer Science II), CS:3330 (Algorithms), ECE:3330 (Software Design), and ECE:3350 (Computer Architecture).

** Track depth elective must be an advanced course in a subject area within the track.