ELECTRICAL ENGINEERING – Computer Track

1st 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	MATH1560	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	MATH2560	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
	S	ECE:2400	Linear Systems I	3	P: ENGR:2120; MATH:2560
	S	ECE:2410	Principles of Electronic Instrumentation	4	P: PHYS:1612; ENGR:2120
	F/S	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
	ALL	CS:2210	Discrete Structures	3	
	F	ECE:3330	Introduction to Software Design	3	P: ENGR:2730
	F	ECE:3700	Electromagnetic Theory	3	P: MATH:3550, PHYS:1612
	F	ECE:3000	Professional Seminar: Electrical Engineering	1	Junior Status
			Total	16	
	ALL	CS:2230	Computer Science II (EFA #1)	4	P: ENGR:2730
	S	ECE:3350	Computer Architecture and Organization	3	P: ECE:3320; ENGR:2730
	S	ECE:3360	Embedded Systems and System Software	3	P: ENGR:2730, ECE:3320; C: ECE:2410
	ALL		Elective Focus Area # 2	3	
	ALL		Elective Focus Area # 3	3	
	ALL		General Education Component #33	3	
4Th Year			Total	19	
	F/S	ECE:4880	Principles of ECE Design	3	Senior Status P:ECE2410; ENGR:2730
	ALL	CS:3330	Algorithms	3	P: CS:2230, minimum C-; CS:2210, minimum C-; MATH:1550
	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		Track 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: ECE:3400 Linear Systems II, ECE:3410 Electronic Circuits, ECE:3500 Communications Systems, ECE:3600 Control Systems, ECE:3720 Semiconductor Devices or ECE:3540 Communication Networks**

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