

# ELECTRICAL ENGINEERING – Computer Track (Option 2)

1 <sup>st</sup> Year	Session	Course	Course Name	SH	P: Prerequisite; C: Corequisite
	F/S	Math 1550 (22M:031)	Engineering Math I: Single Variable Calculus	4	P: MPT Level 3 score of 9 or higher or ALEKS score of 75
	F	ENGR:1100 (059:005)	Introduction to Engineering Problem-Solving	3	
	ALL	CHEM:1110(004:011)	Principles of Chemistry I	4	
	ALL	RHET:1030 (010:003)	Rhetoric	4	
	F	ENGR:1000 (059:090)	Engr Success for First Year Students	1	First Semester Standing
<b>Total</b>				<b>16</b>	
	F/S	MATH1560 (22M:032)	Engineering Math II: Multi-Variable Calculus	4	P: MATH 1550 (22M:031)
	F/S	ENGR:1300 (059:006)	Introduction to Engineering Computing	3	C: MATH:1550 (22M:031)
	ALL	PHYS:1611 (029:081)	Introductory Physics I	4	C: MATH:1550 (22M:031)
	ALL	MATH:2550(22M:033)	Engineering Math III: Matrix Algebra	2	P: MATH:1550 (22M:031)
	ALL		General Education Component #1	3	
<b>Total</b>				<b>16</b>	
<b>2<sup>nd</sup> Year</b>				<b>TOTAL</b>	<b>16</b>
	ALL	MATH2560(22M:034)	Engineering Math IV: Differential Equations	3	P:MATH:1560(22M:032);MATH 2550(22M:033)
	F/S	PHYS:1612 (029:082)	Introductory Physics II	4	P:PHYS:1611(029:081); C:MATH:1560(22M:032)
	ALL	ENGR:2110 (059:007)	Engineering Fundamentals I:Statics	2	P:MATH:1550(22M:031); C:MATH1560(22M:032); C:PHYS:1611(029:081)
	F/S	ENGR:2120(059:008)	Engineering Fundamentals II: Electrical Circuits	3	C:MATH:2560(22M:034)
	ALL	ENGR:2130(059:009)	Engineering Fundamentals III: Thermodynamics	3	P:CHEM:1110(004:011); PHYS:1611(029:081) C:MATH:1560 (22M:032)
<b>Total</b>				<b>15</b>	
	F/S	MATH:3550(22M:037)	Engineering Math V: Vector Calculus	3	P: MATH:2560(22M:034)
	S	ECE:2400(055:040)	Linear Systems I	3	P: ENGR:2120(059:008); MATH2560(22M:034)
	S	ECE:2410 (055:018)	Principles of Electronic Instrumentation	4	P: PHYS:1612 (029:082); ENGR:2120(059:008)
	F/S	ENGR:2730(057:017)	Computers in Engineering	3	P: ENGR:1300(059:006)
	ALL		General Education Component #2	3	
<b>Total</b>				<b>16</b>	
<b>3<sup>rd</sup> Year</b>				<b>Total</b>	<b>16</b>
	F/S	STAT:2020(22S:039)	Probability and Stat for Engineering & Phys Sci	3	P:MATH:1560 (22M:032)
	F	ECE:3320 (055:032)	Intro to Digital Design	3	Sophomore Status
	ALL	CS:2210 (22C:019)	Discrete Structures	3	P: ENGR: 2730(057:017)
	F	ECE:3330 (055:033)	Introduction to Software Design	3	P: ENGR:2730 (057:017)
	F	ECE:3700 (055:070)	Electromagnetic Theory	3	P: MATH:3550(22M:037); PHYS:1612(029:082)
	F	ECE:3000 (055:091)	Professional Seminar: Electrical Engineering	1	Junior Status
<b>Total</b>				<b>16</b>	
	ALL	CS:2310 (22C:021)	Computer Science II (EFA #1)	3	C: CS:1310 (22C:019)
	S	ECE:3350 (055:035)	Computer Architecture and Organization	3	P: ECE:3320 (055:032); ENGR:2730(057:017)
	S	ECE:3360 (055:036))	Embedded Systems and System Software	3	P: ENGR:2730(057:017)
	ALL		Elective Focus Area #2	3	
	ALL		Elective Focus Area #3	3	
	ALL		General Education Component #3	3	
<b>Total</b>				<b>18</b>	
<b>4<sup>th</sup> Year</b>				<b>Total</b>	<b>15</b>
	F/S	ECE:4880 (055:088)	Principles of Electrical Engineering Design	3	Senior Status P:ECE2410(55:018);ENGR:2730(57:017)
	ALL	CS:3310 (22C:031)	Algorithms	3	P:C- or higher in CS:2310 (22C:021)
	ALL		Elective Focus Area #4	3	
	ALL		Track Breadth Elective*	3	
	ALL		General Education Component #4	3	
<b>Total</b>				<b>15</b>	
	F/S	ECE:4890 (055:089)	Senior Electrical Engineering Design	3	Senior Status P:ECE:4880 (055:088); Three required track courses
	ALL		Track Depth Elective **	3	
	ALL		Elective Focus Area #5	3	
	ALL		Elective Focus Area #6	3	
	ALL		General Education Component #5	3	
<b>Total</b>				<b>15</b>	

\* Track breadth elective must be chosen from Electrical lists

\*\* Track depth elective must be an advanced course in a subject area within the track. Normally this is defined as a 3000-level course which has one of the required courses as a pre-requisite. See ECE Undergraduate Handbook.