

Electrical Engineering 4 Year Semester Road Map with Quarter Equivalencies

Freshman Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area A1	3	
	GE Area A2	3	
MAT 1140	Calculus I (GE Area B4)	4	MAT 114, MAT 115
CHM 1210/L (3+1) or CHM 1150 (4)	General Chemistry I or General Chemistry for Engineers	4	CHM 121, 121L or CHM 115
Total Units		14	

Freshman Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
BIO 1110	Life Science (GE Area B2)	2	BIO 110
MAT 1150	Calculus II (GE Area B4)	4	MAT 115, MAT 116
PHY 1510/L	Introduction to Newtonian Mechanics (GE Area B1, B3)	4	PHY 131, PHY 132
ECE 1310	C for Engineers	3	ECE 114/L
ECE 1101/L	Electrical Circuit Analysis I	4	ECE 109/L, ECE 207/L
Total Units		17	
Total Units for Year		31	

Sophomore Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C1	3	
MAT 2240	Elementary Linear Algebra and Differential Equations	3	MAT 224
PHY 1520/L	Introduction to Electromagnetism and Circuits	4	PHY 133
ECE 2200	Introduction to Microelectronics Circuits	3	ECE 220
ECE 2300/L	Digital Logic Design	4	ECE 204/L
Total Units		17	

Sophomore Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area D1	3	
MAT 2140	Calculus III	4	MAT 214, MAT 215
ECE 2101/L	Electrical Circuit Analysis II	4	ECE 207/L, ECE 209/L
ECE 2200L	Introduction to Microelectronics Circuits Lab	1	ECE 220L
ECE 3301/L	Introduction to Microcontrollers	4	ECE 341/L
Total Units		16	
Total Units for Year		33	

Junior Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C2	3	
	GE Area D2	3	
ECE 3101/L	Signals and Systems	4	ECE 306/L, ECE 307
ECE 3200	Microelectronic Devices and Circuits	3	ECE 320
ECE 3709/L	Control Systems Engineering	4	ECE 309/L
Total Units		17	

Junior Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
ECE 3200L	Analog Microelectronics Laboratory	1	ECE 320L
ECE 3250	Electromagnetic Fields	3	ECE 302
ECE 3715	Probability, Statistics, and Random Processes for Electrical and Computer Engineers	3	ECE 315
ECE 3810	Introduction to Power Engineering	3	ECE 310
	Technical Elective I	3	
ECE 4064	Professional Engineering Practice	1	ECE 464
Total Units		14	
Total Units for Year		31	

Senior Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C3	3	
	GE Area D3	3	
ECE 3810L	Introduction to Power Engineering Lab	1	ECE 310L
ECE 4705	Communication Systems	3	ECE 405
EGR 4810/4820	Project Design Principles and Applications (GE Area B5)	2	EGR 481, EGR 482
	Technical Elective II	3	
Total Units		15	

Senior Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C4	3	
	GE Area D4	3	
	GE Area E	3	
ECE 4705L	Communication Systems Laboratory	1	ECE 405L
EGR 4830	Project Design Principles and Applications (GE Area B5)	1	ECE 467
	Technical Elective III	3	
	Technical Elective IV	1	
Total Units		15	
Total Units for Year		30	