

Computer 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	
	GE Area C1	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		17	

Freshman Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
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 1101/L	Electrical Circuit Analysis I	4	ECE 109/L, ECE 207/L
ECE 1310	C for Engineers	3	ECE 114/L
Total Units		15	
Total Units for Year		32	

Sophomore Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area E	3	
BIO 1110	Life Science (GE Area B2)	2	BIO 110
MAT 2240	Elementary Linear Algebra and Differential Equations	3	MAT 224
PHY 1520/L	Introduction to Electromagnetism and Circuits	4	PHY 133
ECE 2300/L	Digital Logic Design	4	ECE 204/L
Total Units		16	

Sophomore Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
MAT 2140	Calculus III	4	MAT 214, MAT 215
ECE 2101/L	Electrical Circuit Analysis II	4	ECE 207/L, ECE 209/L
ECE 2310	Object-Oriented Programming	3	ECE 256
ECE 2200	Introduction to Microelectronics Circuits	3	ECE 220, ECE 325
Total Units		14	
Total Units for Year		30	

Junior Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C2	3	
	GE Area D1	3	
ECE 2200L	Introduction to Microelectronics Circuits Lab	1	ECE 220L, ECE 325L
ECE 3101	Signals and Systems	3	ECE 306/L
ECE 3300/L	Digital circuit design using Verilog	4	ECE 205/L
Total Units		14	

Junior Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C3	3	
	GE Area D2	3	
ECE 3301/L	Introduction to Microcontrollers	4	ECE 341/L
ECE 3310	Data Structures and Algorithms	3	ECE 304
ECE 3715	Probability, Statistics, and Random Processes for Electrical and Computer Engineers	3	ECE 315
Total Units		16	
Total Units for Year		30	

Senior Year (Fall)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area D3	3	
ECE 4300	Computer Architecture	3	ECE 425
ECE 4310	Operating Systems for Embedded Applications	3	ECE 426
ECE 4064	Professional Engineering Practice	1	ECE 464
EGR 4810/4820	Project Design Principles and Applications (GE Area B5)	2	EGR 481, EGR 482
	Technical Elective I	3	
Total Units		15	

Senior Year (Spring)			
Course #	Course Name	Units	Quarter Equivalent/s
	GE Area C4	3	
	GE Area D4	3	
	Technical Elective II	3	
	Technical Elective III	3	
	Technical Elective IV	3	
	Technical Elective V	1	
EGR 4830	Project Design Principles and Applications (GE Area B5)	1	ECE 467
Total Units		17	
Total Units for Year		32	