

# Electrical Engineering

## Bachelor of Science Degree

### Curriculum year 2014-2016

#### FRESHMAN YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ENGR 1050 Engr Discipline & Skills I	1		CH 1020 & 1021 Gen Chemistry II	4	
ENGR 1060 Engr Discipline & Skills II	1		ENGR 1070 Program & Prob Slvng I	1	
CH 1010 & 1011 General Chemistry	4		ENGR 1080 Program & Prob Slvng II	1	
ENGL 1030 Accelerated Composition	3		ENGR 1090 Program & Prob Slvng III	1	
MATH 1060 Calculus I	4		Hum/Soc Sci req	3	
Hum/Soc Sci req	3		MATH 1080 Calculus II	4	
			PHYS 1220 Physics with Calculus I	3	
	16			17	

#### SOPHOMORE YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
CPSC 1110 & 1111 C/C++	3		ECE 2120 Electrical Engr Lab II	1	
ECE 2010 Logic & Computing Devices	2		ECE 2620 Electric Circuits II	3	
ECE 2020 Electric Circuits I	3		ECE 2720 Computer Organization	3	
ECE 2090 Logic Lab	1		ECE 2730 Computer Org Lab	1	
ECE 2110 Electrical Engineering Lab I	1		MATH 2080 Differential Equations	4	
MATH 2060 Calculus III	4		Hum/Soc Sci req OR EE Tech Elec	3	
PHYS 2210 Physics with Calculus II	3		[ECE 2220 Sys Progrmng]		
	17			15	

#### JUNIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
ECE 3110 Electrical Engr Lab III	1		ECE 3120 Lab IV	1	
ECE 3200 Electronics I	3		ECE 3170 Random Signal	3	
ECE 3300 Signals, Sys, & Transforms	3		ECE 3210 Electronics II	3	
ECE 3600 Electric Power Engineering	3		ECE 3710 Microcntrlr Interfacing	3	
ECE 3800 Electromagnetics	3		ECE 3720 Microcontroller Lab	1	
Adv. Mathematics Elective <sup>1</sup>	3		ECE 3810 Fields, Waves & Circuits	3	
			ENGL 3140 Technical writing	3	
	16			17	

#### SENIOR YEAR

Fall semester	Cr	Term completed	Spring semester	Cr	Term completed
COMM 1500 & 1501 or COMM 2500 & 2501	3		ECE 4960 Systems Design II	2	
ECE 4090 Cont & Discrete Sys Design	3		EE Technical Elective OR	3	
ECE 4270 Communications Systems	3		Hum/Soc Sci req		
ECE 4950 Systems Design I	2		EE Technical Elective	3	
EE Technical Elective	3		Hum/Soc Sci req	3	
			Special Elective <sup>2</sup>	3	
	14			14	

#### NOTES:

1. Advanced Mathematics Elective Options: MATH 4190, MATH 4340, MATH 4350, MATH 4530, or MATH 4540.
2. Special Elective Options:
  - a. 3 additional credits of approved Humanities/Social Science courses; or
  - b. ELE 3010 - Executive Leadership and Entrepreneurship I or ELE 4010 - Executive Leadership and Entrepreneurship II; or
  - c. An additional 3-credit, 400-level course from the EE Technical Elective List or the CpE Technical Elective List; or
  - d. An additional 3-credit MATH course from the following list: MATH 3110 (Linear Algebra), MATH 4120 (Intro. to Modern Algebra), MATH 4190 (Discrete Math I), MATH 4340 (Advanced Engineering Math), MATH 4350 (Complex Variables), MATH 4400 (Linear Programming), MATH 4410 (Intro to Stochastic Models), and MATH 4530 (Advanced Calculus I), MATH 4540 (Advanced Calculus II).