

**ELECTRICAL ENGINEERING PROGRAM****FRESHMAN YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>		
ENL	101	Critical Writing & Reading I	3	0	3	ENL	102	Critical Writing & Reading II	3	0	3		
EGR	101	Intro. Engineering Applied Science I	1½	1½	2	EGR	102	Intro. Engineering App. Science II	1½	1½	2		
MTH	113	Calculus Applied Science & Eng. I	4	0	4	MTH	114	Calculus Applied Science & Eng. II	4	0	4		
		Science Elective ¹	3	0	3	PHY	111	Physics for Science & Engineering I	3½	1½	4		
		General Education Elective ²	3	0	3	ECE	160	Found. Comp. Engineering I ³	3	2	4		
						15							17

SOPHOMORE YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>		
ECE	201	Circuit Theory I	3	1½	3½	ECE	202	Circuit Theory II	3	1½	3½		
ECE	260	Digital Logic & Computer Design	3	1½	3½	ECE	263	Embedded System Design	3	1½	3½		
ECE	250	Fundamentals of MATLAB	½	1½	1	ECE	264	Object Oriented Software Develop.	3	2	4		
MTH	213	Calculus Applied Science & Eng. III	4	0	4	MTH	212	Differential Equations	3	0	3		
PHY	112	Physics for Science & Engineering II	3½	1½	4	ENL	266	Technical Communications ⁴	3	0	3		
						16							17

JUNIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>		
		Engineering Mathematics ⁵	3	0	3	ECE	310	Engineering Ethics ⁶	1	0	1		
ECE	311	Digital Electronics	3	3	4	ECE	312	Analog Electronics	3	3	4		
ECE	320	Discrete-Time Linear Systems	3	0	3	ECE	321	Continuous-Time Linear Systems	3	0	3		
ECE	335	Electromagnetic Theory I	3	0	3	ECE	336	Electromagnetic Theory II	3	0	3		
		General Education Elective ²	3	0	3	ECE	384	Random Signals & Noise	3	0	3		
						16							17

SENIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	
ECE	457	Design Project I ⁷	2	3	3	ECE	458	Design Project II	1	6	3	
ECE	471	Communication Theory	3	0	3			Technical Elective ⁸	3	0	3	
		Technical Elective ⁸	3	0	3			Technical Elective ⁸	3	0	3	
		Science Elective ¹	3	0	3			General Education Elective ²	3	0	3	
		General Education Elective ²	3	0	3							12
						15						

TOTAL CREDITS = 125

R = Recitation (hours)

L = Laboratory (hours)

C = Number of Credits

¹ Must be taken from this list: all CHM, MTX, and PHY courses numbered above 150; all BIO courses numbered above 199; or 100-level BIO courses with the S designation.

² See General Education requirements (Areas C, D, and G).

³ This course meets the General Education Area I (Tier 2) requirement: Information and Computer Literacy.

⁴ This course meets the General Education Area W (Tier 2) requirement: Writing Skills.

⁵ Must be taken from this list: ECE 455, ECE 485, MTH 221, MTH 311, MTH 350, or MTH 421.

⁶ This course meets the General Education Area E requirement: Ethics and Social Responsibility.

⁷ This course meets the General Education Area O requirement: Oral Skills.

⁸ Must be taken from approved list of courses.