

**DUAL COMPUTER & 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		
		General Education Elective ¹	3	0	3	PHY	111	Physics for Science & Eng. I	3½	1½	4		
ECE	160	Foundations Comp. Engineering I ²	3	2	4	ECE	161	Foundations Comp. Engineering II	3	2	4		
						16							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	257	Fund. System Software w/ UNIX	2	0	2	ECE	250	Fundamentals of MATLAB	½	1½	1		
ECE	260	Digital Logic & Computer Design	3	1½	3½	ECE	263	Embedded System Design	3	1½	3½		
PHY	112	Physics for Science & Eng. II	3½	1½	4	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		
							ENL	266	Technical Communications ³	3	0	3	
						17							18

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>		
		General Education Elective ¹	3	0	3	ECE	310	Engineering Ethics ⁴	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	368	Digital Design	2	3	3	
CIS	370	Design of Operating Systems	3	2	4	ECE	469	Computer Networks	3	0	3		
MTH	350	Applied Discrete Mathematics	3	0	3	ECE	384	Random Signals and Noise	3	0	3		
						17							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	335	Electromagnetic Theory I	3	0	3	ECE	336	Electromagnetic Theory II	3	0	3		
ECE	457	Design Project I ⁵	2	3	3	ECE	458	Design Project II	1	6	3		
ECE	471	Communication Theory	3	0	3	ECE	460	Computer Systems Perform. Eval.	3	0	3		
CIS	360	Algorithms and Data Structures	3	0	3			Technical Elective ⁶	3	0	3		
								General Education Elective ¹	3	0	3		
						15							15

...plus 12 additional credits: 2 Science Electives and 2 General Education courses.

TOTAL CREDITS = 144

R = Recitation (hours)

L = Laboratory (hours)

C = Number of Credits

¹ See General Education requirements (Areas C, D, and G).

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

³ This course meets the General Education Area W (Tier 2) requirement: Writing Skills.

⁴ This course meets the General Education Area E requirement: Ethics and Social Responsibility.

⁵ This course meets the General Education Area O requirement: Oral Skills.

⁶ Must be taken from approved list of courses.