



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 ¹	1½	1½	2	EGR	102	Intro. Engineering App. Science II	1½	1½	2
MTH	113	Calculus Applied Science & Eng. I ²	4	0	4	MTH	114	Calculus Applied Science & Eng. II	4	0	4
		Science Elective ³	3	0	3	PHY	111	Physics for Science & Engineering I ⁴	3½	1½	4
		University Studies Elective ⁵	3	0	3	ECE	160	Found. Comp. Engineering I	3	2	4
						<u>15</u>			<u>17</u>		

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 ⁶	3	0	3
						<u>16</u>			<u>17</u>		

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 ⁷	3	0	3	ECE	310	Engineering Ethics	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
		University Studies Elective ⁵	3	0	3	ECE	384	Random Signals & Noise	3	0	3
									3	0	3
						<u>16</u>			<u>17</u>		

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 ⁸	2	3	3	ECE	458	Design Project II ⁹	1	6	3
ECE	471	Communication Theory	3	0	3			Technical Elective ¹⁰	3	0	3
		Technical Elective ¹⁰	3	0	3			Technical Elective ¹⁰	3	0	3
		Science Elective ³	3	0	3			University Studies Elective ⁵	3	0	3
		University Studies Elective ⁵	3	0	3						
						<u>15</u>			<u>12</u>		

TOTAL CREDITS = 125

R = Recitation (hours)

L = Laboratory (hours)

C = Number of Credits

¹ This course meets the University Studies Cluster 1E requirement: Foundation for Learning through Engagement.

² This course meets the University Studies Cluster 1D requirement: Mathematics.

³ Must be chosen from this list: BIO, BNG, CHM, or MLS course; or a PHY course numbered above 150. One of the courses must come from the University Studies cluster 2B (Science in the Engaged Community) approved list (www.umassd.edu/universitystudies/approvedcourses/). Requirement may not be satisfied by independent study, seminars or internships.

⁴ This course meets the University Studies Cluster 2A requirement: Science of the Natural World.

⁵ See University Studies requirements (Clusters 3 and 4).

⁶ This course meets the University Studies Cluster 1C requirement: Intermediate Writing.

⁷ Must be taken from this list: ECE 355, ECE 455, ECE 485, MTH 221, MTH 311, or MTH 421.

⁸ This course meets the University Studies Cluster 5B requirement: Learning through Engagement.

⁹ This course meets the University Studies Cluster 5A requirement: Capstone Study.

¹⁰ Must be taken from approved list of courses.