



BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

FRESHMAN YEAR

First Semester			R	L	C	Second Semester			R	L	C
ENL 101	Critical Writing & Reading I		3	0	3	ENL 102	Critical Writing & Reading II		3	0	3
EGR 111	Intro. Engineering & Computing ¹		2	3	3	ECE 160	Found. Comp. Engineering I		3	2	4
MTH 153	Calculus Applied Science & Eng. I ²		4	0	4	MTH 154	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						
			<u>16</u>						<u>15</u>		

SOPHOMORE YEAR

First Semester			R	L	C	Second Semester			R	L	C
ECE 201	Circuit Theory I		3	1½	3½	ENL 266	Technical Communications ⁶		3	0	3
ECE 260	Digital Logic & Computer Design		3	1½	3½	ECE 202	Circuit Theory II		3	1½	3½
ECE 250	Fundamentals of MATLAB		1	2	2	ECE 263	Embedded System Design		3	1½	3½
MTH 213	Calculus Applied Science & Eng. III		4	0	4	ECE 264	Object Oriented Software Develop.		3	2	4
PHY 112	Physics for Science & Engineering II		3½	1½	4	MTH 212	Differential Equations		3	0	3
			<u>17</u>						<u>17</u>		

JUNIOR YEAR

First Semester			R	L	C	Second Semester			R	L	C
ECE 311	Digital Electronics		3	3	4	ECE 310	Engineering Ethics		1	0	1
ECE 320	Discrete-Time Linear Systems		3	0	3	ECE 312	Analog Electronics		3	3	4
ECE 335	Electromagnetic Theory I		3	0	3	ECE 321	Continuous-Time Linear Systems		3	0	3
ECE 388	Embedded Design Project		2	3	3	ECE 336	Electromagnetic Theory II		3	0	3
	University Studies Elective ⁵		3	0	3	ECE 384	Random Signals & Noise		3	0	3
			<u>16</u>						<u>17</u>		

SENIOR YEAR

First Semester			R	L	C	Second Semester			R	L	C
ECE 457	Design Project I ⁷		2	3	3	ECE 458	Design Project II ⁸		1	6	3
ECE 471	Communication Theory		3	0	3		Technical Elective ⁹		3	0	3
	Technical Elective ⁹		3	0	3		Science Elective ³		3	0	3
	Engineering Mathematics ¹⁰		3	0	3		University Studies Elective ⁵		3	0	3
	University Studies Elective ⁵		3	0	3				<u>12</u>		
			<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, MAR, 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 This course meets the University Studies Cluster 5B requirement: Learning through Engagement.⁸ This course meets the University Studies Cluster 5A requirement: Capstone Study.⁹ Must be taken from approved list of courses.¹⁰ Must be taken from this list: ECE 355, ECE 455, ECE 485, or MTH 221.