



BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

FRESHMAN YEAR

First Semester			Second Semester		
R	L	C	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			
16			15		

SOPHOMORE YEAR

First Semester			Second Semester		
R	L	C	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
17			17		

JUNIOR YEAR

First Semester			Second Semester		
R	L	C	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
				University Studies Elective ⁵	3 0 3
16			17		

SENIOR YEAR

First Semester			Second Semester		
R	L	C	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
EGR 303	Engineering Economics ¹¹	3 0 3			
15			12		

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 3A, 3B, 4A, and 4B).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 221.¹¹ This course meets the University Studies Cluster 4C requirement: The Nature of the Global Society.