



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						
						16				15	

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
						17				17	

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
		Engineering Mathematics ⁷	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
						16				17	

SENIOR YEAR

First Semester			R	L	C	Second Semester			R	L	C
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						
						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, 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, or MTH 221.⁸ 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.