

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING****FRESHMAN YEAR**

<u>First Semester</u>				<u>Second Semester</u>			
	<u>R</u>	<u>L</u>	<u>C</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 111 Intro. Engineering & Computing ¹	2	3	3	ECE 250 Fundamentals of MATLAB	1	2	2
ECE 160 Foundations Comp. Engineering I	3	2	4	ECE 264 Object Oriented Software Devel.	3	2	4
MTH 153 Calculus Applied Science & Eng. I ²	4	0	4	MTH 154 Calculus Applied Science & Eng. II	4	0	4
University Studies Elective ³	3	0	3	PHY 111 Physics for Science & Eng. I ⁴	3½	1½	4
	17				17		

SOPHOMORE YEAR

<u>First Semester</u>				<u>Second Semester</u>			
	<u>R</u>	<u>L</u>	<u>C</u>		<u>R</u>	<u>L</u>	<u>C</u>
ECE 201 Circuit Theory I	3	1½	3½	ENL 266 Technical Communications ⁵	3	0	3
ECE 256 Foundations of Cyber Security	2	3	3	ECE 161 Foundations Comp. Engineering II	3	2	4
ECE 260 Digital Logic & Computer Design	3	1½	3½	ECE 202 Circuit Theory II	3	1½	3½
MTH 213 Calculus Applied Science & Eng. III	4	0	4	ECE 263 Embedded System Design	3	1½	3½
PHY 112 Physics for Science & Eng. II	3½	1½	4	MTH 212 Differential Equations	3	0	3
	18				17		

JUNIOR YEAR

<u>First Semester</u>				<u>Second Semester</u>			
	<u>R</u>	<u>L</u>	<u>C</u>		<u>R</u>	<u>L</u>	<u>C</u>
ECE 311 Digital Electronics	3	3	4	ECE 310 Engineering Ethics	1	0	1
ECE 370 Design/Impl. RT Embedded RMS	2	3	3	ECE 368 Digital Design	2	3	3
ECE 388 Embedded Design Project	2	3	3	ECE 369 Computer Networks	3	0	3
ECE 355 Applied Discrete Structures	3	0	3	MTH 331 Probability	3	0	3
University Studies Elective ³	3	0	3	Science Elective ⁶	3	0	3
	16				13		

SENIOR YEAR

<u>First Semester</u>				<u>Second Semester</u>			
	<u>R</u>	<u>L</u>	<u>C</u>		<u>R</u>	<u>L</u>	<u>C</u>
ECE 457 Design Project I ⁷	3	0	3	ECE 458 Design Project II ⁸	3	0	3
ECE 320 Discrete-Time Linear Systems	3	0	3	University Studies Elective ³	3	0	3
Technical Elective ⁹	3	0	3	Technical Elective ⁹	3	0	3
EGR 303 Engineering Economics ¹⁰	3	0	3	University Studies Elective ³	3	0	3
	12				12		

TOTAL CREDITS = 122

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 See University Studies requirements (Clusters 3A, 3B, 4A, and 4B).⁴ This course meets the University Studies Cluster 2A requirement: Science of the Natural World.⁵ This course meets the University Studies Cluster 1C requirement: Intermediate Writing.⁶ Must be chosen from the University Studies cluster 2B (Science in the Engaged Community) approved list(www.umassd.edu/universitystudies/approvedcourses/) and be a BIO, BNG, CHM, MAR, or MLS course; or a PHY course numbered above 150. Requirement may not be satisfied by independent study, seminars or internships.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 This course meets the University Studies Cluster 4C requirement: The Nature of the Global Society.