

MECHANICAL ENGINEERING PROGRAM
COLLEGE OF ENGINEERING
UNIVERSITY OF MASSACHUSETTS DARTMOUTH
Catalog Years 2014-15 (Class of 2018) to Catalog Year 2017-18 (Class of 2021)

FRESHMAN YEAR

<u>First 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	
CHM 151 or 153	Prin. Mod. Chemistry for Eng.		3	0	3	MNE 101	Intro to Mech. Eng.		3	0	3	
CHM 161	Intro. Appl. Chem. Lab		1	2	1			University Studies Requirement ¹		3	0	3
EGR 111	Intro. To Eng. & Computing		3	2	3	MTH 154	Calculus Appl. Science & Eng. II		4	0	4	
MTH 153	Calculus Appl Science & Eng. I		4	0	4	PHY 111	Physics for Science & Eng. I ²		4	2	4	
14						17						

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>
EGR 241	Engineering Mechanics		3	0	3	EGR 242	Engineering Mechanics II		3	0	3
MNE 231	Materials Science		3	3	4	MTH 212	Diff. Equations for Engineering		3	0	3
MTH 213	Calculus Applied Science & Eng. III		4	0	4	MNE 220	Engineering Thermodynamics I ²		3	0	3
PHY 112	Physics for Science & Engineering II ²		4	2	4	MNE 252	Mechanics of Materials		3	3	4
						ENL 266	Technical Communications ³		3	0	3
15						16					

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>
EGR 301	Applied Engineering Math		3	1	4	ECE 211	Elements of Electrical Eng. I		3	0	3
EGR 303	Engineering Economics ⁴		3	0	3	ECE 251	Electrical Engineering Lab I		0	3	1
MNE 332	Fluid Mechanics		3 ^{1/2}	1 ^{1/2}	4	MNE 311	Heat Transfer		3	0	3
MNE 345	Design for Manufacturing		3 ^{1/2}	1 ^{1/2}	4	MNE 381	Design for Machine Elements		3	0	3
						MNE 391	Systems Design & Controls Science Elective ⁵		4	2	4
								3	0	3	
15						17					

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>	
MNE 497	ME Design Project I ⁶		2	0	2	MNE 498	ME Design Project II ⁶		2	0	2	
MNE 421	Thermal Systems Design		3	2	4			Technical Elective ⁷		3	0	3
								Technical Elective ⁷		3	0	3
								University Studies Requirement ¹		3	0	3
								University Studies Requirement ¹		3	0	3
15						14						

Total Credits = 123

R = Recitation & Lecture (hours) L = Laboratory (hours)

C = Number of Credits

¹University Studies requirements (Clusters 3A, 3B, 4A, and 4C).

²These courses meet the University Studies Cluster 2 requirement: Scientific Inquiry and Understanding.

³This course meets the University Studies Cluster 1C requirement: Intermediate Writing.

⁴This course meets the University Studies Cluster 4B requirement: Nature of US Society.

⁵Must be taken from approved list of courses.

⁶These courses meet the University Studies Cluster 5 requirement: Integrating the UMD Experience.

⁷Must be taken from approved list of courses.