

**MECHANICAL ENGINEERING PROGRAM
COLLEGE OF ENGINEERING
UNIVERSITY OF MASSACHUSETTS DARTMOUTH
Catalog Years 2018-19 (Class of 2022) and beyond**

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
15						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 Elec. 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
15						MNE	391	Systems Design & Controls Science Elective ⁵	4	2	4
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			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			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 4B).

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 4C requirement: Nature of the Global 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.