

**MECHANICAL ENGINEERING HONORS 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>
<b>ENL 101 H Critical Writing &amp; Reading I</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>ENL 102 H Critical Writing &amp; Reading II</b>	<b>3</b>	<b>0</b>	<b>3</b>
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 <sup>1</sup>	3	0	3
<b>EGR 111 H Intro. To Eng. &amp; Computing</b>	<b>3</b>	<b>2</b>	<b>3</b>	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 <sup>2</sup>	4	2	4
			<b>14</b>				<b>17</b>

**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 <sup>2</sup>	3	0	3
PHY 112 Physics for Science & Engineering II <sup>2</sup>	4	2	4	MNE 252 Mechanics of Materials	3	3	4
				ENL 266 Technical Communications <sup>3</sup>	3	0	3
			<b>15</b>	<b>MNE 280 Honors Enrichment</b>	<b>1</b>	<b>0</b>	<b>1</b>
							<b>17</b>

**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 <sup>4</sup>	3	0	3	ECE 251 Electrical Engineering Lab I	0	3	1
MNE 332 Fluid Mechanics	3 <sup>1/2</sup>	1 <sup>1/2</sup>	4	MNE 311 Heat Transfer	3	0	3
MNE 345 Design for Manufacturing	3 <sup>1/2</sup>	1 <sup>1/2</sup>	4	MNE 381 Design for Machine Elements	3	0	3
<b>MNE 380 Honors Enrichment</b>	<b>1</b>	<b>0</b>	<b>1</b>	MNE 391 System Design & Control	4	2	4
				<b>HON 301 STEM Project Proposal<sup>5</sup></b>	<b>3</b>	<b>0</b>	<b>3</b>
			<b>16</b>	<b>MNE 380 Honors Enrichment</b>	<b>1</b>	<b>0</b>	<b>1</b>
							<b>18</b>

**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>
<b>MNE 497 H ME Design Project I<sup>6</sup></b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>MNE 498 H ME Design Project II<sup>6</sup></b>	<b>2</b>	<b>0</b>	<b>2</b>
MNE 421 Thermal Systems Design	3	2	4	Technical Elective <sup>7</sup>	3	0	3
Technical Elective <sup>7</sup>	3	0	3	Technical Elective <sup>7</sup>	3	0	3
University Studies Requirement <sup>1</sup>	3	0	3	University Studies Requirement <sup>1</sup>	3	0	3
			<b>12</b>	University Studies Requirement <sup>1</sup>	3	0	3
							<b>14</b>

**Total Credits = 123**

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

C = Number of Credits

<sup>1</sup>University Studies requirements (Clusters 3A, 3B, 4A, and 4C).

<sup>2</sup>These courses meet the University Studies Cluster 2 requirement: Scientific Inquiry and Understanding.

<sup>3</sup>This course meets the University Studies Cluster 1C requirement: Intermediate Writing.

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

<sup>5</sup>This course meets the MNE Science Elective requirement.

<sup>6</sup>These courses meet the University Studies Cluster 5 requirement: Integrating the UMD Experience.

<sup>7</sup>Must be taken from approved list of courses.