

**BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING**

**Catalogue**

**Student:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**2020-2021**

**netID:** \_\_\_\_\_

**Advisor:** \_\_\_\_\_

**Year 1**

Semester 1	Cr	Status	Semester 2	Cr	Status
ENGR 002 - Graphical Communication	2		CS 021 - Computer Programming I (QR)	3	
CHEM 031 - General Chemistry I	4		PHYS 031 - Physics for Engineers I	4	
FWIL (ENGS 001/TAP/HCOL 085) <sup>1</sup>	3		PHYS 030 - Problem Solving Session I [opt]	[1]	
MATH 021 - Calculus I	4		MATH 022 - Calculus II	4	
General Education Elective <sup>3</sup>	3		ME 001 - First Year Design Experience <sup>2</sup>	2	
CEMS 050 - CEMS First Year Seminar <sup>1</sup> [Opt]	[1]		ME 003 - Intro. to Robotics [Opt]	[1]	
			Diversity 1 or 2 <sup>3</sup>	3	
<i>Total credits</i>	<i>16-17</i>		<i>Total credits</i>	<i>16-18</i>	

**Year 2**

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 001 - Statics	3		ME 012 - Dynamics	3	
ME 040 - Thermodynamics	3		ME 042 - Applied Thermodynamics (SU)	3	
MATH 121 - Calculus III	4		MATH 271 - Appl Math for Engr & Sci	3	
PHYS 125 - Physics for Engineers II	3		ME 014 - Mechanics of Solids	3	
PHYS 123 - Problem Solving Session II [opt]	[1]		MATH 124 - Linear Algebra or MATH 122 - Applied Linear Algebra	3	
ME 081 - Mech. Engr. Shop Experience	1		ME 083 - Computational Mech. Engr. Lab	1	
Diversity 1 <sup>3</sup>	3				
<i>Total credits</i>	<i>17-18</i>		<i>Total credits</i>	<i>16</i>	

**Year 3**

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 111 - System Dynamics	3		ME 144 - Heat Transfer	3	
ME 143 - Fluid Mechanics	3		ME 171 - Design of Elements	3	
ME 101 - Materials Engineering	3		STAT 143 - Statistics for Engineers	3	
EE 100 - Electrical Engr. Concepts I	4		EE 101 - Digital Control w/ Embedded Systems	4	
ME 123 - Thermo-Fluid Lab <b>OR</b> ME 124 - Materials and Mechanics Lab	2		ME 123 - Thermo-Fluid Lab <b>OR</b> ME 124 - Materials and Mechanics Lab	2	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

**Year 4**

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 185 - Capstone Design I	3		ME 186 - Senior Design Project II	3	
Mechanical Engineering Elective <sup>4</sup>	3		Mechanical Engineering Elective <sup>4</sup>	3	
Mechanical Engineering Elective <sup>4</sup>	3		Mechanical Engineering Elective <sup>4</sup>	3	
Technical Elective <sup>5</sup>	3		Technical Elective <sup>5</sup>	3	
General Education Elective <sup>3</sup>	3		General Education Elective <sup>3</sup>	3	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

**Minimum Total Credits Required for Degree: 125**

1. Foundational Writing and Information Literacy (FWIL) is a University requirement. Students must take either ENGS 001 or HCOL 085 (only for students enrolled in the Honors College). Students transferring from the College of Arts and Sciences can use a TAP class to fulfill this requirement.
  2. First Year Design Experience: [ME 001](#) is a degree requirement designed for first-year students. Internal and external transfer students may substitute 100-level or higher engineering (BME, CE, EE, ENGR, ME) credits for this requirement.
  3. ME General Education Electives: 9 credits of approved general education electives.
  4. ME Electives: [ME 161](#) and all 200-level (or above) ME courses.
  5. Technical Electives: All 100-level (or higher) courses in BME, CE, EE, ENGR, ME, CS, CSYS, MATH, ASTR, BIOC, BIOL, CHEM, GEOL, MMG & PHYS; [STAT 151](#) or higher; [CS 020](#).
- N.B. The University's Sustainability (SU) and Quantitative Reasoning (QR) requirements are built into the Mechanical Engineering curriculum.*

**This document is an advising tool and should be used in combination with a student's degree audit, as well as the published Catalogue for 2020-2021 found at <http://catalogue.uvm.edu/>**