## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING - HONORS COLLEGE

## Catalogue

2021-2022

Student:
netID:

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Year 1						
Semester 1	Cr	Status	Semester 2	Cr	Status	
ENGR 002 - Graphical Communication	2		PHYS 031 - Physics for Engineers I	4		
CHEM 031 - General Chemistry I	4		PHYS 030 - Problem Solving Session I [Optional]	[1]		
FWIL (HCOL 085 - Seminar) <sup>1</sup>	3		QR: MATH 022 - Calculus II	4		
QR: MATH 021 - Calculus I	4		ME 001 - First Year Design Experience	2		
QR: CS 021 - Computer Programming I	3		ME 003 - Intro. to Robotics [Optional]	[1]		
CEMS 050 - CEMS First Year Seminar [Optional]	[1]		HCOL 086 (D1/2) <sup>1</sup> - HCOL Seminar	3		
Total credits	16-17		Total credits	13-15		

Date:

Advisor:

## Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 001 - Statics	3		ME 012 - Dynamics	3	
ME 040 - Thermodynamics	3		SU: ME 042 - Applied Thermodynamics	3	
QR: MATH 121 - Calculus III	4		QR: 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 [Optional]	[1]		General Education Elective <sup>1</sup> (HCOL 186 Seminar)	3	
ME 081 - Mech. Engr. Shop Experience	1		ME 083 - Computational Mech. Engr. Lab	1	
HCOL 185 (D1) <sup>1</sup> - HCOL Seminar	3				
Total credits	17-18		Total credits	16	

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		QR: 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>	2		ME 123 - Thermo-Fluid Lab <b>OR</b>	2	
ME 124 - Materials and Mechanics Lab	2		ME 124 - Materials and Mechanics Lab	2	
QR: MATH 122 or 124 - (Applied) Linear Algebra	3		CEMS 101 - HCOL Research Experience	1	
Total credits	18		Total credits	16	

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>2</sup>	3		Mechanical Engineering Elective <sup>2</sup>	3		
Mechanical Engineering Elective <sup>2</sup>	3		Mechanical Engineering Elective <sup>2</sup>	3		
Technical Elective <sup>3</sup> (ME 193 - Thesis)	3		Technical Elective <sup>3</sup> (ME 194 - Thesis)	3		
General Education Elective <sup>1</sup> (Social Science)	3		General Education Elective <sup>1</sup> (Humanities)	3		
Total credits	15		Total credits	15		

Minimum Total Credits Required for Degree: 125

1. University Requirements & General Education Electives: University Requirements include Diversity (D1/D2), Sustainability (SU), Quantitative Reasoning (QR) and Foundational Writing & Information Literacy (FWIL). At least 3 credits General Education Electives must be from the Humanities and at least 3 credits must be from the Social Sciences. Refer to the CEMS Program Electives for approved Humanities and Social Science elective courses (https://www.uvm.edu/cems/cems-program-electives).

2. ME Electives: ME 161 and all 200-level (or above) ME courses except ME 297, 298, and 299

3. Technical Electives: All 100-level (or higher) courses in BME, CE, EE, ENGR, ME, CS, CSYS, MATH, ASTR, BIOC, BIOL, CHEM, GEOL, MMG & PHYS; <u>STAT 151</u> or higher; <u>CS 020</u>.

## 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 2021-2022 found at http://catalogue.uvm.edu/