

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Catalogue

Student: _____

Date: _____

2024 - 2025

netID: _____

Advisor: _____

Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
MA: MATH 1234 - Calculus I*	4		MA: MATH 1248 - Calculus II*	4	
ENGR 1020 - Graphical Communication	2		N2, QD: PHYS 1500 - Physics for Engineers I MATH 1234	4	
N2, QD: CHEM 1400 - General Chemistry 1	4		PHYS 1510 - Physics Problem Solving I [Optional]	[1]	
Catamount Core (WIL1): ENGL 1001 - Written Expression	3		ME 1010 - First-Year Design Experience	2	
Catamount Core (D1 Diversity 1)	3		QD: CS 1210 - Computer Programming I	3	
CEMS 1500 - CEMS First Year Seminar [Optional]	[1]		Catamount Core (AH Arts & Humanities)	3	
			ME 1310 - Intro to Robotics and Coding [Optional]	[1]	
Total credits	16-17		Total credits	16-18	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
CEE 1100 - Statics*	3		ME 1120 - Dynamics	3	
MATH 1248; PHYS 1500			CEE 1100; MATH 2248		
MA: MATH 2248 - Calculus III	4		ME 1140 - Mechanics of Solids	3	
MATH 1248			CEE 1100		
ME 1210 - Thermodynamics*	3		MA: MATH 2522 - Applied Linear Algebra	3	
MATH 1248; PHYS 1500; CHEM 1400			MATH 1248		
			OR MA: MATH 2544 - Linear Algebra		
N1, QD: PHYS 1550 - Physics for Engineers II	3		MATH 1248; Pre/Coreq: MATH 2248		
PHYS 1500; MATH 1248; Coreq: MATH 2248			MATH 3201 - Adv Engineering Mathematics	3	
PHYS 1560 - Physics Problem Solving II [Optional]	[1]		MATH 2248; Coreq: MATH 2522 or MATH 2544		
ME 1020 - Engineering Shop Experience	1		SU: ME 1220 - Applied Thermodynamics	3	
ENGR 1020			ME 1210		
Catamount Core (AH Arts & Humanities)	3		ME 1510 - Computational Mech Engr Lab	1	
			CEE 1100; Coreq: ME 1140		
Total credits	17-18		Total credits	16	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 2230 - Fluid Mechanics	3		GC: ME 2240 - Heat Transfer	3	
ME 1120; ME 1140; ME 1210; MATH 3201			ME 2230		
ME 2120 - System Dynamics	3		ME 2310 - Design of Elements	3	
ME 1120; Pre/Coreq: MATH 2522 or MATH 2544			ME 1140		
WIL2: ME 2231 - Thermo-Fluid Lab	2		WIL2: ME 2111 - Materials and Mechanics Lab	2	
ME 1120; ME 1140; ME 1210; MATH 3201; Pre/Coreq: ME 2230			ME 1140; Pre/Coreq: ME 2110		
OR ME 2111 - Materials and Mechanics Lab			OR ME 2231 - Thermo-Fluid Lab		
ME 1140; Pre/Coreq: ME 2110			ME 1120; ME 1140; ME 1210; MATH 3201; Pre/Coreq: ME 2230		
ME 2110 - Materials Engineering	3		QD: STAT 2430 - Statistics for Engineering	3	
ME 1140			MATH 1234		
EE 2145 - Electrical Engr Concepts	4		EE 2845 - Digital Control w/ Embedded Sys	4	
MATH 1248			EE 2145; CS 1210		
Total credits	15		Total credits	15	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 4010 - Capstone Design I	3		ME 4020 - Capstone Design II	3	
			ME 4010		
Mechanical Engineering Elective	3		Mechanical Engineering Elective	3	
Mechanical Engineering Elective	3		Mechanical Engineering Elective	3	
Technical Elective	3		Technical Elective	3	
Catamount Core (S1 Social Science AND D1/D2)	3		Catamount Core (S1 Social Science)	3	
Total credits	15		Total credits	15	

Minimum Total Credits Required for Degree: 128

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 2024-2025 found at <http://catalogue.uvm.edu/>

Prerequisite courses are listed below the course name in italics. Prerequisites listed are only for courses, as relevant to your specific degree program, and may have other registration restrictions. Please refer to the catalogue.

* Grade of C- or higher required

Mechanical Engineering Elective: All 3 credit 3000-level ME courses (except ME 3994, ME 3995 and ME 3899). All 3 credit 5000-level ME courses.

Autonomous Controls Elective: EE 2845 or ME 2990.

Technical Elective: All 2000-level (or higher) courses in BME, CEE, EE, EMGT, ENGR, ME, CS, CSYS, MATH, ASTR, BIOC, BIOL, CHEM, GEOL, MMG & PHYS; STAT 2510 or higher.

Catamount Core: Students may take courses that fulfill more than one Catamount Core requirement, but they must still take at least 40 unique credits of courses that have been approved to fulfill Catamount Core requirements.

- ME students can complete the WIL2 sequence (ME 2111 and ME 2231) in one of two ways:

(1) ME 2111 (Fall 25) – ME 2231 (Spring 26)

(2) ME 2231 (Fall 25) – ME 2111 (Spring 26)

Due to the way that the writing outcomes are taught in this course, students must begin the sequence in fall and finish the sequence in spring to fulfill the WIL2 requirement.