BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING - Honors College **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* *MATH 1234*	4	
N2, QD: CHEM 1400 - General Chemistry 1	4		BME 1600 - BME Design 0	2	
ENGR 1020 - Graphical Communication	2		N2, QD: PHYS 1500 - Physics for Engineers I* *MATH 1234*	4	
QD: CS 1210 - Computer Programming I	3		PHYS 1510 - Physics Problem Solving I [Optional]	1	
CEMS 1500 - CEMS First Year Seminar	1		N2: BHSC 1340 - Human Cell Biology	4	
Catamount Core (WIL1): HCOL 1000 - FY Writing Seminar	3		MATH 2500 - Eng Math Linear Algebra Lab	1	
			HCOL 1500 - FY Research Presentation Seminar	3	
Total credits	*17*		*Total credits*	*18-19*	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
CEE 1100 - Statics *MATH 1248; PHYS 1500*	3		BME 2000 - Core 1: Biomechanics & Sensing *MATH 1248; PHYS 1500*	6	
BME 2600 - BME Design 1 *BME 1600*	1		BME 2650 - BME Design 2 *BME 2600*	1	
MA: MATH 2248 - Calculus III *MATH 1248*	4		MATH 3201 - Adv Engineering Mathematics	3	
ANPS 1190 - Ugr Hum Anatomy & Physiology 1	4		ANPS 1200 - Ugr Hum Anatomy & Physiology 2 *ANPS 1190*	4	
EE 2125 - Circuits I *MATH 1248 or MATH 1242*	4		HCOL 2000 - Sophomore Seminar	3	
HCOL 2000 - Sophomore Seminar	3				
Total credits	*19*		*Total credits*	*17*	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
BME 2050 - Core 2: Materials & Transport *BME 2000; BHSC 1340*	6		BME 3000 - Core 3: Systems & Signals *BME 2050; Pre/Coreq: MATH 3201*	6	
QD: STAT 2430 - Statistics for Engineering *MATH 1234*	3		BME 3600 - BME Design 3 *BME 2650*	2	
Catamount Core	3		BME Specialization Elective 1	3	
Catamount Core	3		Catamount Core	3	
Catamount Core	3		Catamount Core	3	
CEMS 2010 - HCOL Research Experience	1		CEMS 2020 - Research Thesis Proposal	1	
Total credits	*19*		*Total credits*	*18*	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
OC: BME 4600 - Capstone Design I	3		BME 4650 - Capstone Design II OR BME 3000 *BME 4600*	3	
BME Engineering Elective (BME 2996 Honors Thesis)	3		BME Specialization Elective 3 (BME 2996 Honors Thesis)	3	
BME Elective (BME 3000 level or higher)	3		BME Engineering Elective (BME 3000 level or higher)	3	
BME Specialization Elective 2	3		Catamount Core	3	
Catamount Core	3		Catamount Core	3	
Total credits	*15*		*Total credits*	*15*	

Minimum Total Credits Required for Degree: 129

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

BME Elective: Any BME course at the 3000-level or higher.

Engineering Elective: Any course at the 1000-level or higher in BME, CEE, EE, ENGR, EMGT, ME, CMPE or CS

BME Specialization Elective 1, 2, 3: Any 3 credits in BCOR, BHSC, BIOC, BIOL, BME, CEE, CEMS, CHEM, CMPE, COMU, CS, EE, EMGT, ENGR, ENSC, EXSC, HLTH, HSCI, MATH, ME, MLS, MMG, NSCI, PHRM, PHYS, RADT, or STAT. The number corresponds to the level at which the course must be taken (1000, 2000, 3000). Other courses may be approved by the BME Undergraduate Program Director.

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.

Students are encouraged to overlap Catamount Core requirements with their PLHC required courses (HCOL 1500 and both HCOL 2000 courses)