BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING

Math/Sci Elective⁴

Total credits

Catalogue 2020-2021

Student:			Date:		
netID:			Advisor:		
Year 1					
Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 050 - CEMS First Year Seminar ¹	1		BME 010 ¹ - BME Design 0	2	
CHEM 031 - General Chemistry I	4		BHSC 034 - Human Cell Biology	4	
ENGR 002 - Graphical Communication	2		MATH 022 - Calculus II	4	
FWIL (ENGS 001/TAP/HCOL 085) ²	3		MATH 120 - Eng Math Linear Algebra Lab	1	
CS 021 - Computer Programming I (QR)	3		PHYS 030 - Prob Solv Session I [Opt]	[1]	
MATH 021 - Calculus I	4		PHYS 031 - Physics for Engineers I	4	
Total credits	17		Total credits	15-16	
Year 2					
Semester 1	Cr	Status	Semester 2	Cr	Status
ANPS 019 - Human Anatomy & Physiology	4		ANPS 020 - Human Anatomy & Physiology	4	
BME 011 - Core 1: Biomechanics & Sensing	6		BME 012 - Core 2: Materials & Transport	6	
BME 013 - BME Design 1	1		BME 014 - BME Design 2	1	
MATH 121 - Calculus III	4		Diversity 1 ³	3	
STAT 143 - Statistics for Engineering	3		MATH 271 - Adv Engineering Mathematics	3	
Total credits	18		Total credits	17	
Year 3					
Semester 1	Cr	Status	Semester 2	Cr	Status
BME 111 - Core 3: Systems & Signals	6		General Education Elective ³ (Social Science)	3	
BME 112 - BME Design 3	2		BME Engineering Elective ⁵	3	
BME Engineering Elective ⁵	3		BME Specialization Elective ⁶	3	
Diversity 1 or 2 ³	3		BME Specialization Elective ⁶	3	
General Education Elective ³ (SU)	3		Free Elective	3	
Total credits	17		Total credits	15	
Year 4					
Semester 1	Cr	Status	Semester 2	Cr	Status
General Education Elective ³ (Humanities)	3		BME Specialization Elective ⁶	3	
BME Specialization Elective ⁶	3		Free Elective	3	
BME 185 - BME Capstone Design I	3		BME 186 - BME Capstone Design II	3	
BME Engineering Elective ⁵	3		BME Engineering Elective ⁵	3	

Minimum Total Credits Required for Degree: 129

3

15

1. BME 010 & CEMS 050 are degree requirements designed for first-year students. Internal and external transfer students may substitute 100-level or higher engineering (BME, CE, EE, EMGT, ENGR, ME) credits for these requirements.

3

15

2. 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.

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3. BME General Education: At least 3 credits must be from the Humanities and at least 3 credits must be from the Social Sciences. Students who don't meet the University sustainability requirement (SU) by taking an engineering or technical course approved for SU should meet this requirement with an SU-approved Gen Ed Elective.

4. Math/Science Elec: Any MATH, STAT, CHEM, PHYS, BIO, BHSC or other science course that has a prerequisite of one of the foundational math or science courses.

5. BME Engineering Elec: Any engineering course at the 0XX or higher level. At least 9 credits must be BME courses at the 200-level or above.

6. BME Specialization Elec: ENGR, MATH/STAT, CS, physical or life science courses at the 100-level or above. At least 9 credits must be at the 200-level or above.

N.B. The University's Quantitative Reasoning (QR) requirement is built into the Biomedical Engineering curriculum. The University's Sustainability (SU) requirement may be fulfilled by taking an engineering or technical course approved for SU, an SU-approved GenEd Elective or a free elective.

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/