| BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING |  |  |  | Catalogue2023-2024 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Student: |  |  | Date: |  |  |
| 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): ENGL 1001 - Written Expression | 3 |  | MATH 2500 - Eng Math Linear Algebra Lab | 1 |  |
| Total credits | 17 |  | Total credits | 15-16 |  |

Year 2

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :--- | :---: | :--- | :--- | :---: | :---: |
| BME 2000 - Core 1: Biomechanics \& Sensing <br> MATH 1248; PHYS 1500 | 6 |  | BME 2050 - Core 2: Materials \& Transport <br> BME 2000; BHSC 1340 |  |  |
| BME 2600 - BME Design 1 <br> BME 1600 | 1 |  | BME 2650 - BME Design 2 <br> BME 2600 |  |  |
| MA: MATH 2248 - Calculus III <br> MATH 1248 | 4 |  | MATH 3201 - Adv Engineering Mathematics | 1 |  |
| ANPS 1190 - Ugr Hum Anatomy \& Physiology 1 | 4 |  | ANPS 1200 - Ugr Hum Anatomy \& Physiology 2 <br> ANPS 1190 | 3 |  |
| QD: STAT 2430 - Statistics for Engineering <br> MATH 1234 | 3 | Catamount Core (Diversity 1) | 4 |  |  |
| Total credits | 18 |  | Total credits | 3 |  |

Year 3

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :--- | :---: | :---: | :--- | :---: | :---: |
| BME 3000 - Core 3: Systems \& Signals <br> BME 2050; Pre/Coreq: : ATH 3201 | 6 |  | BME Specialization Elective (1000 level or higher) | 3 |  |
| BME 3600 - BME Design 3 <br> BME 2650 | 2 |  | BME Specialization Elective (3000 level or higher) | 3 |  |
| BME Engineering Elective | 3 |  | BME Engineering Elective (BME 3000 level or higher) | 3 |  |
| Catamount Core (Diversity 1 or Diversity 2) | 3 |  | Catamount Core (S1 Social Science) |  |  |
| Catamount Core (SU Sustainability) | 3 |  | Catamount Core (AH Arts \& Humanities) | 3 |  |
| Total credits | 17 |  | Total credits | 3 |  |


| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OC: BME 4600 - Capstone Design I | 3 |  | BME 4650 - Capstone Design II BME 4600 <br> OR BME 3000 level or higher | 3 |  |
| BME Specialization Elective (3000 level or higher) | 3 |  | BME Specialization Elective (3000 level or higher) | 3 |  |
| BME Engineering Elective (BME 3000 level or higher) | 3 |  | BME Engineering Elective (BME 3000 level or higher) | 3 |  |
| Math/Science Elective | 3 |  | Catamount Core (GC Global Citizenship) | 3 |  |
| Catamount Core (AH Arts \& Humanities) | 3 |  | Catamount Core (S1 Social Science) | 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 2023-2024 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

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

BME Engineering Elective: Any engineering course at the 1000-level or higher. At least 9 credits must be BME courses at the 3000-level or above.

BME Specialization Elective: ENGR, MATH/STAT, CS, physical or life science courses at the 1000-level or above. At least 9 credits must be at the 3000-level or above.

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.

