## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Catalogue
2020-2021

| Student: | Date: |  |  | 2020-2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| netID: |  |  | Advisor: |  |  |
| Year 1 |  |  |  |  |  |
| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| CEMS 1500-CEMS First Year Seminar ${ }^{1}$ | 1 |  | EE $1100{ }^{1}$ - EE Principles and Design | 2 |  |
| CHEM 1400-General Chemistry I | 4 |  | General Education Elective ${ }^{3}$ | 3 |  |
| ENGR 1020-Graphical Communication [Opt] | [2] |  | Diversity 1 or $2^{4}$ | 3 |  |
| WIL (ENGS 1001/HCOL 1000) ${ }^{2}$ | 3 |  | MATH 1248 - Calculus II | 4 |  |
| CS 1210 - Computer Programming I (QR) | 3 |  | MATH 2500 - Eng Math Linear Algebra Lab | 1 |  |
| MATH 1234 - Calculus I | 4 |  | PHYS 1510 - Prob Solv Session I [Opt] | [1] |  |
|  |  |  | PHYS 1500 - Physics for Engineers I | 4 |  |
| Total credits | 15-17 |  | Total credits | 17-18 |  |

Year 2

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :--- | :---: | :---: | :--- | :--- | :---: |
| CEE 1100-Statics | 3 |  | STAT 151 - Applied Probability | 3 |  |
| EE 2125 - Circuits I | 4 |  | EE 2135 - Circuits II | 4 |  |
| Diversity 1 ${ }^{4}$ | 3 |  | EE 2185 - Circuits Design Project | 2 |  |
| MATH 2248 - Calculus III | 4 |  | EE 2810 - Fundamentals of Digital Design | 3 |  |
| PHYS 125 - Physics for Engineers II | 3 |  | MATH 3201 - Adv. Engineering Mathematics | 3 |  |
| PHYS 123 - Prob. Solv. Session II [Opt] | $[1]$ |  |  |  |  |
| Total credits | $17-18$ |  | Total credits | 15 |  |

Year 3

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :--- | :---: | :---: | :--- | :--- | :---: | :---: |
| EE 3110 - Electronics I | 4 |  | EE $3515 / 3315 / 3410 / 3815 / 3610^{5}$ | 4 |  |
| EE 3100 - Electromagnetic Field Theory | 4 |  | EE $3515 / 3315 / 3410 / 3815 / 3610$ | 4 |  |
| EE 3150 - Signals \& Systems | 4 |  | EE $3515 / 3315 / 3410 / 3815 / 3610$ | 4 |  |
| EE 3115 - Electronics Laboratory | 2 |  | EE $3000-$ Engineering Ethics/Leadership ${ }^{6}$ | 1 |  |
| General Education Elective ${ }^{3}$ | 3 |  | EE $3415-$ Electronics Design Project | 3 |  |
| Total credits | 17 |  | Total credits | 16 |  |

Year 4

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EE 4100 - Capstone Design I | 3 |  | EE 4200 - Capstone Design II | 3 |  |
| EE Elective ${ }^{6}$ | 3 |  | EE Elective ${ }^{6}$ (3XXX) | 3 |  |
| EE Elective ${ }^{6}$ (3XXX) | 3 |  | EE Elective ${ }^{6}$ (3XXX) | 3 |  |
| EMGT 2041 - Engineering Economics | 3 |  | General Education Elective ${ }^{3}$ | 3 |  |
| Free Elective ${ }^{7}$ | 3 |  | Free Elective ${ }^{7}$ | 3 |  |
| Total credits | 15 |  | Total credits | 15 |  |

Minimum Total Credits Required for Degree: 127

1. CEMS 050 \& EE 001 are degree requirements designed for first-year students. Internal and external transfer students may substitute additional 100-level or higher engineering (BME, CE, EE, ENGR, ME) credits for these requirements
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.
3. General Education Electives: At least 3 credits must be from the Humanities and at least 3 credits must be from the Social Sciences. Students who do not meet the SU requirement through engineering courses, should use GenEd credits to do so.
4. Students must take one three-credit D1 course and a second three-credit D1 or D2 course, per University Diversity Requirement.
5. If a student takes more than three of these courses, one course may count as an EE Elective (see footnote 6).
6. EE Electives: EE 192, EE 193, EE 194, EE 195, EE 198 and all 200-level, $3-4$ credit EE courses. At least 9 credits must be at the 200 -level or above. Four distinct $3-4$ credit EE electives are required. EE Elective requirement may not be met by taking three 4 credit courses.
7. Free Electives: Students may use free elective credits to pursue coursework germane to their interests. Students are encouraged to work with their advisor(s) to select courses that complement their curricula and support their academic and career goals. Students should select one course that meets the University Sustainability Requirement (SU) if they have not taken an SU engineering course.
N.B. The University's Quantitative Reasoning (QR) requirement is built into the Electrical 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/

