

BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING

Catalogue

2022-2023

Student: _____

Date: _____

netID: _____

Advisor: _____

Year 1

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
|---|-----------|--------|---|--------------|--------|
| CEMS 050 - CEMS First Year Seminar | 1 | | QR: CS 021 - Computer Programming I | 3 | |
| CHEM 031 - General Chemistry I | 4 | | PHYS 031 - Physics for Engineers I | 4 | |
| ENGR 002 - Graphical Communication | 2 | | PHYS 030 - Prob. Solv. Session I [Optional] | [1] | |
| FWIL (ENGS 001, TAP, HCOL 085) ¹ | 3 | | QR: MATH 022 - Calculus II | 4 | |
| QR: MATH 021 - Calculus I | 4 | | SU: CE 003 - First Year Design Experience | 2 | |
| Diversity 1 or 2 ¹ (D1/D2) | 3 | | CHEM 032 - General Chemistry II | 4 | |
| <i>Total credits</i> | <i>17</i> | | <i>Total credits</i> | <i>17-18</i> | |

Year 2

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
|---|-----------|--------|--|-----------|--------|
| CE 010 - Geomatics | 4 | | CE 005 or CE 006 | 3 | |
| QR: MATH 121 - Calculus III | 4 | | SU: CE 151 - Water & Wastewater Engr. | 3 | |
| BIOL 001 - Principles of Biology | 4 | | QR: MATH 122 - Applied Linear Algebra | 3 | |
| QR: STAT 143 - Statistics for Engineers | 3 | | QR: MATH 271 - Adv Engineering Mathematics | 3 | |
| SU: CE 132 - Environmental Systems | 3 | | EE 075 - Electrical Circuits & Sensors | 4 | |
| <i>Total credits</i> | <i>18</i> | | <i>Total credits</i> | <i>16</i> | |

Year 3

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
|---|-----------|--------|---------------------------------------|-----------|--------|
| SU: CE 134 - System Focused Design Engr | 3 | | ME 040 - Thermodynamics | 3 | |
| CE 133 - Transportation Systems | 3 | | CE 180 - Geotechnical Principles | 3 | |
| GEOL 055 - Environmental Geology | 4 | | CE 182 - Geotechnical Principles Lab | 2 | |
| CE 160 - Hydraulics | 3 | | CE 254 - Environmental Qual. Analysis | 4 | |
| CE 162 - Hydraulics Lab | 2 | | Diversity 1 ¹ (D1) | 3 | |
| <i>Total credits</i> | <i>15</i> | | <i>Total credits</i> | <i>15</i> | |

Year 4

| Semester 1 | Cr | Status | Semester 2 | Cr | Status |
|--|-----------|--------|--|-----------|--------|
| Env Engr Elective ² | 3 | | SU: CE 175 - Capstone Design | 3 | |
| Env Engr Elective ² | 3 | | Env Engr Elective ² | 3 | |
| HydroGeoPhys Design Elective ² | 3 | | BioGeoChem Design Elective ² | 3 | |
| Science/Tech Elective ³ | 3 | | General Education Elective ¹ (Social Science) | 3 | |
| General Education Elective ¹ (Humanities) | 3 | | General Education Elective ¹ | | |
| <i>Total credits</i> | <i>15</i> | | <i>Total credits</i> | <i>15</i> | |

Minimum Total Credits Required for Degree: 128

- University Requirements & General Education Electives: University Requirements include Diversity (D1/D2), Sustainability (SU), Quantitative Reasoning (QR) and Foundational Writing & Information Literacy (FWIL). At least 3 credits General Education Electives must be from the Humanities and at least 3 credits must be from the Social Sciences. Refer to the CEMS Program Electives for approved Humanities and Social Science elective courses (<https://www.uvm.edu/cems/cems-program-electives>).
- Env Engr Electives: CE 218, CE 260, EMGT 201, all HydroGeoPhys and BioGeoChem Design Electives, and some CE 295 (Special Topics) courses (consult advisor).
 HydroGeoPhys Design Electives: [CE 262](#), [CE 263](#), [CE 265](#), [CE 285](#), [CE 288](#), and some [CE 295](#) (Special Topics) courses (consult faculty advisor).
 BioGeoChem Design Electives: [CE 247](#), [CE 253](#), [CE 255](#), [CE 256](#), and some [CE 295](#) (Special Topics) courses (consult faculty advisor).
- Science/Technical Elective: [ME 042](#) or any 100-level or higher course in Engineering (BME, CE, EE, EMGT, ENGR, ME) or Science (BIOL, CHEM, GEOL, PHYS) or [PSS 161](#), [PSS 264](#), [PSS 268](#), or [PSS 269](#) or [NR 288](#), [NR 289](#).

N.B. CE 134 must be taken before or together with CE 175. CE 175 - the capstone experience is to be taken in the last or second-last semester before graduation and should not be taken until after four of the following five courses are completed: CE 133, CE 151, CE 160, CE 180, and CE 254. The remaining fifth course can be taken in the same semester as CE 175.

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 2022-2023 found at <http://catalogue.uvm.edu/>