

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

**Catalogue**

Student: \_\_\_\_\_

Date: \_\_\_\_\_

**2020-2021**

netID: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Year 1**

Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 050 - CEMS First Year Seminar <sup>1</sup>	1		CE 003 - First Year Design Experience <sup>1</sup>	2	
CHEM 031 - General Chemistry I	4		CS 021 - Computer Programming I (QR)	3	
ENGR 002 - Graphical Communication	2		MATH 022 - Calculus II	4	
FWIL (ENGS 001/TAP/HCOL 085) <sup>2</sup>	3		PHYS 030 - Prob. Solv. Session I [opt]	[1]	
MATH 021 - Calculus I	4		PHYS 031 - Physics for Engineers I	4	
General Education Elective <sup>3</sup>	3		Diversity 1 or 2 <sup>3</sup>	3	
<i>Total credits</i>	<i>17</i>		<i>Total credits</i>	<i>16-17</i>	

**Year 2**

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 001 - Statics	3		ME 012 - Dynamics	3	
CE 010 - Geomatics	4		CE 132 - Environmental Systems	3	
MATH 121 - Calculus III	4		MATH 271 - Appl. Math. for Engr. & Sci.	3	
STAT 143 - Statistics for Engineers	3		MATH 122 - Applied Linear Algebra	3	
Diversity 1 <sup>3</sup>	3		EE 075 - Electrical Circuits & Sensors	4	
<i>Total credits</i>	<i>17</i>		<i>Total credits</i>	<i>16</i>	

**Year 3**

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 100 - Mechanics of Materials	3		CE 101 - Materials & Structures lab	3	
CE 133 - Transportation Systems	3		GEOL 001, BIOL 001 or BIOL 002	4	
CE 160 - Hydraulics	3		CE 170 - Structural Analysis I	3	
CE 162 - Hydraulics Lab	2		CE 180 - Geotechnical Engineering	3	
CE 151 - Water & Wastewater Engr	3		CE 182 - Geotechnical Principles Lab	2	
			General Education Elective <sup>3</sup>	3	
<i>Total credits</i>	<i>14</i>		<i>Total credits</i>	<i>18</i>	

**Year 4**

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 185 - Capstone Design I	3		CE 186 - Capstone Design II	3	
Technical Elective <sup>4</sup>	3		CE Design Elective <sup>5</sup>	3	
CE Design Elective <sup>5</sup>	3		CE Elective <sup>6</sup>	3	
CE Design Elective <sup>5</sup>	3		CE Elective <sup>6</sup>	3	
General Education Elective <sup>3</sup>	3		CE Elective <sup>6</sup>	3	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

**Minimum Total Credits Required for Degree: 128**

- [CEMS 050](#) & [CE 003](#) 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.
  - 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.
  - University & CEE General Education Requirements include: 15 credits of approved General Education (GenEd) electives including one 3-credit D1 course, a second 3-credit D1 or D2 course, and 3 credits each of Humanities and Social Sciences.
  - Technical Elective: All 100 level or above courses in engineering (BME, CE, EE, EMGT, ENGR, ME).
  - Design Electives: [CE 172](#), [CE 173](#), [CE 241](#), [CE 247](#), [CE 253](#), [CE 255](#), [CE 256](#), [CE 262](#), [CE 263](#), [CE 265](#), [CE 273](#), [CE 285](#), [CE 286](#), [CE 288](#) and some [CE 295](#) (Special Topics) courses (consult advisor). At least one design elective must be from [CE 172](#), [CE 173](#), [CE 241](#), and [CE 286](#).
  - CE Electives: Any 200-level CE course, [CE 172](#), [CE 173](#), and [EMGT 201](#).
- N.B. The University's Sustainability (SU) and Quantitative Reasoning (QR) requirements are built into the Civil Engineering curriculum.

**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/>**