

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

**Catalogue**

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

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

**2021-2022**

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

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

**Year 1**

Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 050 - CEMS First Year Seminar	1		SU: CE 003 - First Year Design Experience	2	
CHEM 031 - General Chemistry I	4		QR: CS 021 - Computer Programming I	3	
ENGR 002 - Graphical Communication	2		QR: MATH 022 - Calculus II	4	
FWIL (ENGS 001, TAP, HCOL 085) <sup>1</sup>	3		PHYS 030 - Prob. Solv. Session I [Optional]	[1]	
QR: MATH 021 - Calculus I	4		PHYS 031 - Physics for Engineers I	4	
General Education Elective <sup>1</sup>	3		Diversity 1 or 2 <sup>1</sup> (D1/D2)	3	
<b>Total credits</b>	<b>17</b>		<b>Total credits</b>	<b>16-17</b>	

**Year 2**

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 001 - Statics	3		ME 012 - Dynamics	3	
CE 010 - Geomatics	4		SU: CE 132 - Environmental Systems	3	
QR: MATH 121 - Calculus III	4		QR: MATH 271 - Appl. Math. for Engr. & Sci.	3	
QR: STAT 143 - Statistics for Engineers	3		QR: MATH 122 - Applied Linear Algebra	3	
Diversity 1 <sup>1</sup> (D1)	3		EE 075 - Electrical Circuits & Sensors	4	
<b>Total credits</b>	<b>17</b>		<b>Total credits</b>	<b>16</b>	

**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		CE 170 - Structural Analysis I	3	
CE 160 - Hydraulics	3		CE 180 - Geotechnical Engineering	3	
CE 162 - Hydraulics Lab	2		CE 182 - Geotechnical Principles Lab	2	
GEOL 001, BIOL 001 or BIOL 002	4		SU: CE 151 - Water & Wastewater Engr	3	
			General Education Elective <sup>1</sup> (Social Science)	3	
<b>Total credits</b>	<b>15</b>		<b>Total credits</b>	<b>17</b>	

**Year 4**

Semester 1	Cr	Status	Semester 2	Cr	Status
SU: CE 134 - System Focused Design Engr	3		SU: CE 175 - Capstone Design	3	
CE Design Elective: 172, 173, 241, 281, or 286 <sup>3</sup>	3		CE Design Elective <sup>3</sup>	3	
Technical Elective <sup>2</sup>	3		CE Elective <sup>4</sup>	3	
CE Design Elective <sup>3</sup>	3		CE Elective <sup>4</sup>	3	
General Education Elective <sup>1</sup> (Humanities)	3		CE Elective <sup>4</sup>	3	
<b>Total credits</b>	<b>15</b>		<b>Total credits</b>	<b>15</b>	

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

1. 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>).
2. Technical Elective: All 100 level or above courses in engineering (BME, CE, EE, EMGT, ENGR, ME).
3. Design Electives: [CE 172](#), [CE 173](#), [CE 201](#), [CE 241](#), [CE 247](#), [CE 253](#), [CE 255](#), [CE 256](#), [CE 262](#), [CE 263](#), [CE 265](#), [CE 273](#), [CE 281](#), [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](#), [CE 281](#) and [CE 286](#).
4. CE Electives: Any 200-level CE course, [CE 172](#), [CE 173](#), and [EMGT 201](#).

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:

**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 2021-2022 found at <http://catalogue.uvm.edu/>**