## **BACHELOR OF SCIENCE IN CIVIL ENGINEERING - HONORS COLLEGE**

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		HCOL 086 (D1/2) <sup>3</sup> - HCOL Seminar	3	
ENGR 002 - Graphical Communication	2		MATH 022 - Calculus II	4	
HCOL 085 <sup>1</sup> - The Pursuit of Knowledge	3		PHYS 030 - Prob. Solv. Session I [opt]	[1]	
MATH 021 - Calculus I	4		PHYS 031 - Physics for Engineers I	4	
CS 021 - Computer Programming I (QR)	3		General Education Elective <sup>3</sup>	3	
Total credits	17		Total credits	16-17	

## Year 2

Teal 2						
Semester 1	Cr	Status	Semester 2	Cr	Status	
CE 001 - Statics	3		HCOL 186 <sup>3</sup> - HCOL Seminar	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		
HCOL 185 (D1) <sup>3</sup> - HCOL Seminar	3		EE 075 - Electrical Circuits & Sensors	4		
Total credits	17		Total credits	16		

## 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	
ME 012 - Dynamics	3		CEMS 101 - HCOL Research Experience	1	
Total credits	17		Total credits	16	

## Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 185 - Capstone Design I	3		CE 186 - Capstone Design II	3	
CE 193 - Honors Thesis	3		CE 194 - Honors Thesis	3	
CE Design Elective <sup>4</sup>	3		CE Design Elective <sup>4</sup>	3	
CE Design Elective <sup>4</sup>	3		CE Elective <sup>5</sup>	3	
CE Elective <sup>5</sup>	3		CE Elective <sup>5</sup>	3	
General Education Elective <sup>3</sup>	3				
Total credits	18		Total credits	15	

Minimum Total Credits Required for Degree (with Honors): 132

- 1. <u>CEMS 050</u> & <u>CE 003</u> 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.
- 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. 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.
- 4. Design Electives: <u>CE 172</u>, <u>CE 173</u>, <u>CE 241</u>, <u>CE 247</u>, <u>CE 253</u>, <u>CE 255</u>, <u>CE 256</u>, <u>CE 262</u>, <u>CE 263</u>, <u>CE 265</u>, <u>CE 273</u>, <u>CE 285</u>, <u>CE 286</u>, <u>CE 288</u> and some <u>CE 295</u> (Special Topics) courses (consult advisor). At least one design elective must be from <u>CE 172</u>, <u>CE 173</u>, <u>CE 241</u>, and <u>CE 286</u>.
- 5. 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/