BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Catalogue

2019-2020

Student: netID: Date:

Year 1					
Semester 1	Cr	Status	Semester 2	Cr	Status
ENGR 002 - Graphical Communication	2		PHYS 031 - Physics for Engineers I	4	
CHEM 031 - General Chemistry I	4		PHYS 030 - Prob. Solv. Session I [opt]	[1]	
FWIL (ENGS 001/TAP/HCOL 085) ¹	3		CS 020 - Programming for Engineers	3	
MATH 021 - Calculus I	4		MATH 022 - Calculus II	4	
General Education Elective ³	3		CE 003 - First Year Design Experience ²	2	
ENGR 050 - First Year Engr Seminar ²	1		Diversity 1 or 2 ³	3	
Total credits	17		Total credits	16-17	

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 ³	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	
			General Education Elective ³	3	
Total credits	14		Total credits	18	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
CE 172 - Structural Steel Design or	2			3	
CE 173 - Reinforced Concrete	3		CE 186 - Capstone Design II		
CE 185 - Capstone Design I	3		CE Design Elective⁵	3	
CE Design Elective⁵	3		CE Elective ⁶	3	
Technical Elective ⁴	3		CE Elective ⁶	3	
General Education Elective ³	3		CE Elective ⁶	3	
Total credits	15		Total credits	15	

Minimum Total Credits Required for Degree: 128

1. 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.

2. <u>CE 003</u> & <u>ENGR 050</u> are degree requirements designed for first-year students. Internal and external transfer students may substitute 100-level or higher engineering (BME, CE, EE, ENGR, ME) credits for these requirements. 3. Required General Education (GenEd) Electives: 9 credits of approved GenEd electives. Students must also take one three-credit D1 course and a second three-credit D1 or D2 course, per University Diversity Requirement.

4. Technical Electives: All 100-level or above courses in engineering (BME, CE, EE, ENGR, ME).

5. CE Design Electives: <u>CE 238</u>, <u>CE 241</u>, <u>CE 256</u>, <u>CE 261</u>, <u>CE 262</u>, <u>CE 265</u>, <u>CE 273</u>, <u>CE 281</u>, <u>CE 284</u>, <u>CE 285</u>, <u>CE 286</u>, <u>CE 288</u> and some <u>CE 295</u> (Special Topics) courses (consult advisor). <u>CE 173</u> is a design elective if <u>CE 172</u> has also been taken.

6. CE Electives: Any 200-level CE course.

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 2019-2020 found at http://catalogue.uvm.edu/