## **BACHELOR OF SCIENCE IN ENGINEERING** Catalogue 2019-2020 Student: Date: netID: Advisor: Year 1 Status Semester 2 Cr Status Semester 1 Cr ME 001/ EE 001/ CE 003/ BME 001 -ENGR 002 - Graphical Communication 2 2 First Year Design Experience<sup>2</sup> CHEM 031 - General Chemistry I 4 PHYS 031 - Physics for Engineers I 4 FWIL (ENGS 001/TAP/HCOL 085)<sup>1</sup> 3 [1] PHYS 030 - Prob. Solv. Session I [opt] MATH 021 - Calculus I 4 MATH 022 - Calculus II 4 General Education Elective<sup>3</sup> Diversity 1 or 2<sup>3</sup> 3 ENGR 050 - First Year Engr Seminar [opt] CS 020 - Programming for Engineers [1] 3

Total credits

## Year 2

Total credits

Semester 1	Cr	Status	Semester 2	Cr	Status
EE 003 + 081 / EE 075 / EE 100	4/5		CE 001 - Statics	3	
Free Elective	3		ME 040 - Thermodynamics	3	
Diversity 1 <sup>3</sup>	3		Free Elective	3	
MATH 121 - Calculus III	4		MATH 271 - Appl Math for Engr & Sci	3	
PHYS 125 - Physics for Engineers II	3		STAT 143 Statistics for Engineers or	2	
PHYS 123 - Prob. Solv. Session II [opt]	[1]		STAT 151 Applied Probability	3	
Total credits	17-18		Total credits	15	

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## Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
Engineering Science Elective <sup>4</sup>	3		Engineering Science Elective <sup>4</sup>	3	
Engineering Science Elective <sup>4</sup>	3		Engineering Science Elective <sup>4</sup>	3	
Engineering Science Elective <sup>4</sup>	3		Engineering Science Elective <sup>4</sup>	3	
General Education Elective <sup>3</sup>	3		General Education Elective <sup>3</sup>	3	
Technical Elective <sup>5</sup>	3		Free Elective	3	
Total credits	15		Total credits	15	

## Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
Engineering Science Elective <sup>4</sup>	3		Engineering Science Elective <sup>4</sup> (2XX)	3	
Engineering Science Elective <sup>4</sup> (2XX)	3		Engineering Science Elective <sup>4</sup> (2XX)	3	
Technical Elective <sup>5</sup>	3		Technical Elective <sup>5</sup>	3	
Technical Elective <sup>5</sup>	3		Free Elective	3	
CE/ME 185 or BME/EE 187 - Capstone Design <sup>6</sup>	3		CE/ME 186 or BME/EE 188 - Capstone Design <sup>6</sup>	3	
Total credits	15		Total credits	15	

Minimum Total Credits Required for Degree: 120

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- 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. First Year Design: This degree requirement is designed for first-year students. Internal and external transfer students may substitute 100-level or higher engineering (BME, CE, EE, ENGR, ME) credits for this requirement.
- 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. Engineering Science Electives: All BME, CE, EE, ENGR and ME courses (except <u>ENGR 010</u>). Must have a minimum of 9 credits at the 200-level.
- 5. Technical Electives: Any 100-level or higher course in CEMS or BSAD; natural or physical sciences courses with advisor approval. BSE students may not double count BSAD courses as both Tech Electives and Gen Ed.
- 6. Capstone Design I and II courses must have the same prefix.
- N.B. The University's Quantitative Reasoning (QR) requirement is built into the Engineering curriculum. Students should use General Education Electives and/or Engineering Science Electives to satisfy the Sustainability (SU) requirement.

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/