

**BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

**Catalogue**

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

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

**2021-2022**

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

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

**Year 1**

Semester 1	Cr	Status	Semester 2	Cr	Status
CS Elective (OXX)	3		QR: CS 110 - Intermediate Programming <sup>1</sup>	4	
QR: CS 021 - Computer Programming I <sup>1</sup>	3		QR: CS 064 - Discrete Structures	3	
FWIL (ENGS 001, TAP, HCOL 085) <sup>2</sup>	3		QR: MATH 022 - Calculus II	4	
QR: MATH 021 - Calculus I	4		Diversity 1 or 2 <sup>2</sup> (D1/D2)	3	
CEMS 050 - CEMS First Year Seminar	1		Natural Science elective (non-lab) <sup>3</sup>	3	
CS 050 - First Year Seminar	1				
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>17</i>	

**Year 2**

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: CS 124 - Data Structures and Algorithms	3		QR: CS 125 - Computability and Complexity	3	
QR: CS 121 - Computer Organization	3		QR: CS 120 - Advanced Programming	3	
QR: MATH 121, 122 or 124, 173, 271	3-4		QR: STAT 151 - Applied Probability	3	
QR: STAT 143 - Statistics for Engineering	3		QR: MATH 121, 122 or 124, 173, 271	3-4	
Natural Science elective (with lab) <sup>3</sup>	4		Sustainability <sup>2</sup> (SU)	3	
<i>Total credits</i>	<i>16-17</i>		<i>Total credits</i>	<i>15-16</i>	

**Year 3**

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: CS 201 - Operating Systems	3		CS Elective (1XX)	3	
Diversity 1 <sup>2</sup> (D1)	3		CS Elective (2XX)	3	
CS Elective (1XX)	3		CS Elective (2XX)	3	
Humanities Elective <sup>4</sup>	3		Social Sciences Elective <sup>4</sup>	3	
Free Elective	3		Free Elective	3	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

**Year 4**

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: CS 224 - Algorithm Design and Analysis	3		CS Elective (2XX)	3	
CS 292 - Senior Seminar	1		Capstone Experience <sup>5</sup>	3	
Free Elective	3		Free Elective	3	
Free Elective	3		Free Elective	3	
Free Elective	3		Free Elective	3	
<i>Total credits</i>	<i>13</i>		<i>Total credits</i>	<i>15</i>	

**Minimum Total Credits Required for Degree: 121**

- Grade of C- or higher required in CS 021 and CS 110.
  - Students must fulfill the University Requirements - Diversity (D1/D2), Sustainability (SU), Foundational Writing & Information Literacy (FWIL), and Quantitative Reasoning (QR).
  - Refer to the catalogue for approved Natural Science courses.
  - Refer to the CEMS Program Electives for approved Humanities and Social Science elective courses (<https://www.uvm.edu/cems/cems-program-electives>).
  - Capstone Experience courses: CS 202, 205, 206, 211, 225, 226, 228, 253, 254, and 275.
- N.B. Students must achieve a minimum GPA of 2.00 in all courses with a CS prefix. The minimum 2.00 GPA also includes courses without a CS prefix that are substituted for a CS course 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 2021-2022 found at <http://catalogue.uvm.edu/>**