BACHELOR OF SCIENCE IN DATA SCIENCE   Catalogue

| Student: | | Date: | | 2021-2022 |

| netID: | | Advisor: | | |

Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: MATH 021 - Calculus I	4		QR: MATH 022 - Calculus II	4	
QR: STAT 087 - Intro to Data Science	3		FWIL (ENGS 001, TAP, HCOL 085)[2]	3	
CEMS 050 - CEMS First Year Seminar	1		Diversity 1 or 2[2] (D1/D2)	3	
QR: CS 021 - Computer Programming I	3		Sustainability 1[2] (SU)	3	
Humanities Elective[1]	3		QR: MATH 052/CS 064 - Fund of Math/Discr Strct	3	
Total credits	14			16	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: MATH 122 or 124 - (Applied) Linear Algebra	3		QR: STAT 151 or 251 - Applied Prob/Prob Theory	3	
Natural Science Sequence[3]	4		Natural Science Sequence[3]	4	
QR: CS 110 - Intermediate Programming	4		QR: CS 124 - Data Structures and Algorithms	3	
QR: STAT 141/ STAT 143 / STAT 211	3		Diversity 1[2] (D1)	3	
			QR: STAT 201 - Stat Computing & Data Analysis	3	
Total credits	14		Total credits	16	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
MATH Elective (1XX)	3		MATH Elective (1XX)	3	
Social Science Elective[1]	3		CS Elective (1XX)	3	
QR: CS 204 - Database Systems	3		QR: STAT 288 - Statistical Learning	3	
Data Science Elective[4]	3		Data Science Elective(2XX)[4]	3	
QR: STAT 221 - Statistical Methods II	3		QR: STAT 229 - Survival/Logistic Regression	3	
Total credits	15		Total credits	15	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: STAT 287 - Data Science I	3		STAT 281, MATH/STAT 293, CS 283 - Capstone	3	
QR: CS 224 - Algorithm Design & Analysis	3		Data Science Elective(2XX)[4]	3	
Data Science Elective(2XX)[4]	3		Free Elective	3	
Professional Development Elective[1]	3		Free Elective	3	
Free Elective	3		Free Elective	3	
Total credits	15		Total credits	15	

Minimum Total Credits Required for Degree: 120

1. Refer to the CEMS Program Electives for approved Humanities, Social Science, and Professional Development elective courses (https://www.uvm.edu/cems/cems-program-electives).
2. Students must fulfill the University Requirements - Diversity (D1/D2), Sustainability (SU), Foundational Writing & Information Literacy (FWIL), and Quantitative Reasoning (QR).
3. Refer to the catalogue for approved Natural Science courses.
4. Data Science Electives: Choose 12 Credits in Data Science (DS) electives selected from the list of approved courses in MATH/STAT/CS/CSYS/NR, with at least 9 of these credits at the 200-level (or above): Options include CS 120, 148, 166, 167, 205, 224, 228, 254; CS/CSYS 302, 352; MATH 121, 173, 235, 266, 268; MATH/CS 237; MATH/CSYS 300, 303; STAT 183, 224, 231, 235, 241, 330, 387; STAT/CS 288; NR 143; CE 359; CE/CSYS/STAT 369. Additional courses, including special topics courses, may be granted approval if appropriate (consult faculty advisor)

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/