

<b>Bachelor of Science Data Science Major Catalogue 2019-20</b>				<b>Student:</b>						
				<b>NetID:</b>	<b>Honors College</b>					
				<b>Advisor:</b>						
<i>Course #</i>	<i>Description</i>	<i>Course Credits</i>	<i>Credits Earned</i>	<i>Grade</i>	<i>Course #</i>	<i>Description</i>	<i>Course Credits</i>	<i>Credits Earned</i>	<i>Grade</i>	
<b>Required Courses</b>				<b>Data Science Electives*</b>						
CS 064 - Discrete Structures or MATH 052 - Fundamentals of Mathematics		3			<b>*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):</b> Options include CS 120, 148, 166, 167, 205, 224, 228, 231, 251, 254, 256, 302, 332, 352; MATH 121, 173, 235, 237, 266, 268, 300, 303; STAT 183, 224, 225, 231, 233, 235, 241, 288, 330, 387; NR 143; CE 359, 369. Alternative Courses may be approved by the DS Curriculum Committee.					
STAT 151 or STAT 251 or CS 128		3								
	(min 6)									
<b>CS Core</b>										
CS 008 - Intro to Website Dev		3								
CS 021 - Programming I		3								
CS 110 - Intermediate Prog.		3								
CS 124 - Data Structures		4								
CS 204 - Database Systems		3								
CS 224 - Algorithm Design & Analysis		3								
CS ≥ 1XX		3								
	(min 22)									
<b>STAT Core</b>				<b>Science sequence in PHYS, CHEM or BIOL</b>						
STAT 087 - Introduction to Data Science		3			PHYS 051 - Fundamentals of Physics I		4			
STAT 141 or STAT 143 or STAT 211		3			PHYS 152 - Fundamentals of Physics II		4			
STAT 221 - Statistical Methods II		3			CHEM 031 - General Chemistry I		4			
STAT 201 - Stat Computing & Data Analysis		3			CHEM 032 - General Chemistry II		4			
STAT 223 - Applied Multivariate Analysis		3			BIOL 001 - Principles of Biology		4			
STAT 229 - Survival/ Logistic Regression		3			BIOL 002 - Principles of Biology		4			
STAT/ CS 287 - Data Science I		3								
	(min 21)									
<b>MATH Core</b>				<b>University Requirements</b>						
Math 021 - Calculus I		4			D1 diversity		3			
Math 022 - Calculus II		4			D1 or D2 diversity		3			
MATH 124 - Linear Algebra or 122 - Applied Linear Algebra	MATH	3			FWIL: Foundational Writing and Info Literacy: HCOL 085		3			
MATH ≥ 1XX		3			SU: Sustainability		3			
MATH ≥ 1XX		3								
	(min 20)									
<b>Credit Summary</b>				<b>Free Electives</b>						
Left column credits (69 min):				Students are encouraged to use free elective credits to complete a minor in an area of application (e.g., biology, social sciences).						
Right column credits (51 min):				HCOL 086						
<b>Total Credits Required (120 min):</b>				HCOL 185						
<b>This document is an advising tool and should be used with both the student's individual degree audit on the myUVM portal as well as the officially published Catalogue for 2019-2020 found at <a href="http://catalogue.uvm.edu/">http://catalogue.uvm.edu/</a></b>				HCOL 186						
				CEMS 101						
				Honors Thesis*						
				(min 22)						
				*Honors Thesis credits may be applied to the CS Core, MATH Core, or Data Science Electives, per Advisor approval.						