

Bachelor of Science Data Science Major Catalogue 2016-17				Student:					
				Advisor:					
Course #	Description	Course Credits	Credits Earned	Grade	Course #	Description	Course Credits	Credits Earned	Grade
<b>Required Courses</b>				<b>Data Science Electives*</b>					
CS 064 - Discrete Structures or MATH 052 - Fundamentals of Mathematics		3			*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, 205, 224, 228, 231, 251, 256, 302, 332, 352; MATH 121, 173, 235, 237, 266, 268, 300, 303; STAT 183, 224, 225, 231, 233, 235, 241, 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>				<b>(min 12)</b>					
CS 008 - Intro to Website Dev		3			<b>Science sequence in PHYS, CHEM or BIOL</b>				
CS 021 - Programming I		3			PHYS 051 - Fundamentals of Physics I		4		
CS 110 - Intermediate Prog.		3			PHYS 152 - Fundamentals of Physics II		4		
CS 124 - Data Structures		4			CHEM 031 - General Chemistry I		4		
CS 204 - Database Systems		3			CHEM 032 - General Chemistry II		4		
CS ≥ 1xx		3			BIOL 001 - Principles of Biology		4		
CS ≥ 2xx		3			BIOL 002 - Principles of Biology		4		
(min 22)					(min 8)				
<b>STAT Core</b>				<b>University Requirements</b>					
STAT 087 - Introduction to Data Science		3			D1 diversity		3		
STAT 141 or STAT 143 or STAT 211		3			D1 or D2 diversity		3		
STAT 221 - Statistical Methods II		3			FWIL: Foundational Writing and Info Literacy (ENGS 001 or HCOL 085)		3		
STAT 201 - Stat Computing & Data Analysis		3			SU: Sustainability		3		
STAT 223 - Applied Multivariate Analysis		3			(min 9)				
STAT 229 - Survival/ Logistic Regression		3			<b>Free Electives</b>				
STAT 287 - Data Science I		3			Students are encouraged to use free elective credits to complete a minor in an area of application (e.g., biology, social sciences).				
(min 21)									
<b>MATH Core</b>									
Math 021 - Calculus I		4							
Math 022 - Calculus II		4							
MATH 124 - Linear Algebra or MATH 122 - Applied Linear Algebra		3							
MATH ≥ 1xx		3							
MATH ≥ 1xx		3							
MATH ≥ 1xx		3							
(min 20)									
<b>Credit Summary</b>									
Left column credits (69 min):									
Right column credits (51 min):									
<b>Total Credits Required (120 min)</b>				<b>(min 22)</b>					