2023 Catalog-B.S. Data Science Degree Plan (120 Hours)

STUDENT NAME:		**UPDATED BY:**	
STUDENT ID:		**DATE:**	
AUDITS: 45_____ 75 _____	**PRE-HEALTH: NO YES**	**MINOR:**	**DOUBLE MAJOR/DEGREE:**

Course Title	Subject Prefix/ Course #	HR	Semester Taken	Grade
CORE CURRICULUM				
Communication (010)				
		3		
		3		
Mathematics (020)				
Calculus I	MATH 2417*	3		
Life and Physical Sciences (030)				
Mechanics	PHYS 2325	3		
Electromagnetism and Waves	PHYS 2326	3		
Language, Philosophy and Culture (040)				
		3		
Creative Arts (050)				
		3		
American History (060)				
		3		
		3		
Government/Political Science (070)				
American National Government	GOVT 2305	3		
State and Local Government	GOVT 2306	3		
Social and Behavioral Science (080)				
		3		
Component Area Option (090)				
Calculus I	MATH 2417*	3		
Calculus II	MATH 2419*	3		
Physics Laboratory I	PHYS 2125	3		
Major Preparatory Courses				
Mechanics	PHYS 2325	3		
Physics Laboratory I	PHYS 2125	1		
Electromagnetism and Waves	PHYS 2326	3		
Physics Laboratory II	PHYS 2126	1		
Calculus I	MATH 2417*	4		
Calculus II	MATH 2419*	4		
Linear Algebra	MATH 2418	4		

*(MATH 2413 & MATH 2414 & MATH 2415) can be used instead of (MATH 2417 & MATH 2419)

Course Title	Subject Prefix/ Course #	HR	Semester Taken	Grade
Major Preparatory Courses (Cont.)				
Programming Fundamentals	CS 1436	4		
Computer Science I	CS 1337	3		
Discrete Math. & Combinatorics	MATH 3315	3		
OR Discrete Mathematics for Computing I	CS 2305	3		
Computer Science II	CS 2336	3		
Major Core Courses				
Data Structures and Intro. to Algorithm.	CS 3345	3		
Database Systems	CS 4347	3		
Intro. to Big Data Managements & Analytics	CS 4371	3		
Computational Methods for Data Scient.	CS 4372	3		
Introduction to Machine Learning	CS 4375	3		
Theoretical Concepts of Calculus	MATH 3310	3		
Advanced Calculus	MATH 3351	3		
Mathematical Analysis I	MATH 4301	3		
Introduction to Data Analysis	STAT 3355	3		
Probability	STAT 4351	3		
Mathematical Statistics	STAT 4352	3		
Numerical and Statistical Computing	STAT 4354	3		
Applied Linear Models	STAT 4355	3		
Introduction to Statistical Learning	STAT 4360	3		
Capstone Project	STAT/CS/MATH 4475	4		
Electives-45 Upper Level Hours Needed to Graduate (75 UL for double degree)				
Freshman Seminar	UNIV 1010	0		
NS&M Freshman Seminar	NATS 1101	1		
Core Seminar	UNIV 2020	0		
Free Elective		3		
Free Elective		3		
Free Elective		3		
Free Elective		3		
Free Elective		1		