

DATA SCIENCE

B.S., major in Data Science requirements (47 credits):

Code	Title	Credits
Prerequisites		
MTH 245	Calculus I	4
MTH 246	Calculus II	4
Data Science Core		
CSC 121	Computers and Scientific Thinking	3
MTH 365	Introduction to Data Science	3
MTH 366	Machine Learning	3
GDE 426	Data Visualization	3
CSC 542	Database Design and Security	3
Mathematics/Statistics Core		
MTH 350	Applied Linear Algebra and Differential Equations	3
or MTH 541	Mathematics for Data Scientists	
MTH 360	Elementary Probability and Statistics	3
or MTH 361	Probability and Statistics in the Health Sciences	
MTH 362	Statistical Modeling	3
Computer Science Core		
CSC 221	Introduction to Programming	3
CSC 222	Object-Oriented Programming	3
CSC 321	Data Structures	3
Electives (Choose one from two elective tracks)		6
Option 1: Advanced Computer Science track		
Choose 2 of the following courses:		
CSC 421	Algorithm Design and Analysis	
CSC 445	Social Networks Analytics	
CSC 550	Introduction To Artificial Intelligence	
Option 2: Advanced Mathematics/Statistics track		
Choose 2 of the following courses:		
MTH 429	Advanced Linear Algebra	
MTH 561	Mathematical Statistics I	
MTH 562	Mathematical Statistics II	
Total Credits		47