

# DATA SCIENCE

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## B.S., major in Data Science requirements (50 credits):

Code	Title	Credits
<b>Prerequisites</b>		
MTH 245	Calculus I	4
MTH 246	Calculus II	4
<b>Data Science Core</b>		
CSC 121	Computers and Scientific Thinking	3
DSC 365	Introduction to Data Science	3
DSC 366	Machine Learning	3
GDE 426	Data Visualization	3
CSC 542	Database Design and Security	3
DSC 599	Data Science Senior Capstone	3
<b>Mathematics/Statistics Core</b>		
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
<b>Computer Science Core</b>		
CSC 221	Introduction to Programming	3
CSC 222	Object-Oriented Programming	3
CSC 321	Data Structures	3
<b>Electives (Choose one of the following tracks)</b>		<b>6</b>
<b>Option 1: Advanced Computer Science track</b>		
Choose 2 of the following courses:		
CSC 421	Algorithm Design and Analysis	
CSC 445	Social Networks Analytics	
CSC 550	Introduction To Artificial Intelligence	
<b>Option 2: Advanced Mathematics/Statistics track</b>		
Choose 2 of the following courses:		
MTH 429	Advanced Linear Algebra	
MTH 561	Mathematical Statistics I	
MTH 562	Mathematical Statistics II	
<b>Total Credits</b>		<b>50</b>