



**MATHEMATICAL DATA SCIENCE MAJOR**

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The Department of Mathematics offers a major program of study leading to a Bachelor of Arts in Mathematical Data Science. This major explores the volume of data available in a variety of fields, including but not limited to biology, business, and education. This program supports a deep understanding of statistics, programming skills, and communication skills. By studying large data sets in applicable fields, students who major in Mathematical Data Science will learn to access data, ask critical questions, glean patterns and insights from the data, and communicate results to answer real-world problems. The results will be technologically uncovered, researched in literature, and communicated clearly for their intended audiences. A major in this area of study provides a solid foundation for continued work and graduate study in data science surrounding business, science, or social science fields

If any substitutions of waivers of requirements are allowed, please list below and initial.

Course #	Title of Course	Hours Completed	Semester Completed	Grade

**Major: MATHEMATICAL DATA SCIENCE**

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Student's Last Name	First Name	Middle Initial
Advisor	Date Major Declared	

Course #	Title of Course	Hours Required	Semester Completed	Grade
<b>Required Courses</b>				
MAT 100	Fundamentals of Data Science	3		
MAT 124	Calculus I	5		
MAT 214	Calculus II	4		
MAT 215	Linear Algebra	3		
MAT 313	Mathematical Probability and Statistics	3		
MAT 300	Discrete Mathematics & Graph Theory	3		
MAT 340	Statistical Computing in R	3		
MAT 400	Data Science Seminar	3		
<b>Mathematics elective (upper-level course)</b>				
MAT	Upper-Level Elective	3		
<b>Other Required Courses</b>				
CSC 104	Programming Logic and Design	3		
CSC 111/211	Fundamentals of Computer Science	3		
CSC 327	Database Management Systems	3		
ECN 235	Research Methods	3		
<b>One Upper-Level Elective</b>				
	An upper-level course in Biology, Chemistry, Business, Physics, Psychology, Computer Science, Environmental Science, or Economics which has a pre-req in the discipline	3		
<b>TOTAL MAJOR HOURS</b>		<b>45 hrs</b>		