

## Four-Year Degree Plan: Bachelor of Science in Statistical Science

Catalog Year: 2023-2024

This is a degree plan for completing a Bachelor of Science in Statistical Science in eight semesters. This document is meant to be used as a guide for planning purposes only and is intended for use in consultation with a Professional Academic or Faculty advisor. **Students are responsible for consulting advisors and the MSU Denver catalog for degree requirements.** 

Year One					
Semester 1	Fall	Credits	Semester 2	Spring	Credits
MTH 1110	College Algebra for Calculus	4	MTH 1120	College Trigonometry	3
	Written Communication I	3	MTH 2520	R Programming	4
	Oral Communication	3		Written Communication II	3
	Arts and Humanities I	3		Arts and Humanities II	3
	Any course to satisfy hours reqs.	3		Global Diversity	3
Semester 1 Total 16 Semester 2 Total					16

Year Two					
Semester 3	Fall	Credits	Semester 4	Spring	Credits
MTH 1410	Calculus I	4	MTH 2410	Calculus II	4
	Natural and Physical Sciences I	3		Historical	3
	Natural and Physical Sciences II	1		Natural and Physical Sciences III	3
	Social and Behavioral Sciences I	3		Minor II	3
	Minor I	3		Social Behavioral Sciences II	3
	Any course to satisfy hours reqs.	3			
Semester 3 Total 17 Semester 4 Total 16					16

Year Three					
Semester 5	Fall	Credits	Semester 6	Spring	Credits
MTH 3210	Probability and Statistics	4	MTH 3270	Data Science	4
MTH 2420	Calculus III	4		Linear algebra elective	4
	Minor III	3		Minor IV	3
	Ethnic Studies & Social Justice	3		Any course to satisfy hours reqs.	3
Semester 5 Total 14 Semester 6 Total					14

Year Four						
Semester 7	Fall	Credits		Semester 8	Spring	Credits
MTH 3220	Statistical Methods	4		MTH 4230	Regression & Comput. Statistics	4
MTH 4210	Probability Theory	4		MTH 4250	Statistical Theory	4
	Upper division elective	3 or 4		MTH 4290	Senior Statistics Projects	2
	Minor V	3			Minor VI	3
Semester 7 Total 14-15 Semester 8 Total					13	

## **Program Total: 120**

Students must complete all courses in the major with a grade of C- or better. A minor is required for students who are not dual majors or completing a concurrent or second degree. Students must meet with a faculty advisor to declare the statistical science major and to register for the upper division elective Introduction to Proofs (MTH 3100).

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## **Detailed Course Listing**

General Studies				
	Written Communication	6		
	Oral Communication	3		
	Arts and Humanities	6		
-	Social and Behavioral Sciences	6		
	Natural and Physical Sciences	6		
	Historical	3		
-	Global Diversity	0 or 3		
	General Studies Total	30 or 33		

Core Requirements				
MTH 1410	Calculus I	4		
MTH 2410	Calculus II	4		
MTH 2420	Calculus III	4		
MTH 2520	R Programming	4		
MTH 3210	Probability and Statistics	4		
MTH 3220	Statistical Methods	4		
MTH 3270	Data Science	4		
MTH 4210	Probability Theory	4		
MTH 4230	Regression & Comput. Statistics	4		
MTH 4250	Statistical Methods	4		
MTH 4290	Senior Statistics Project	2		
	Core Requirements Total	42		

Specific Degree Requirements				
	Linear algebra elective	4		
	Upper division elective	3 or 4		
Specific Degree Requirements Total 7-8				

Program Totals				
General Studies Requirements	33			
Ethnic Studies & Social Justice	3			
Required Pre-Requisites	7			
Major Courses	42			
Electives	7 or 8			
Unrestricted Electives	9 or 10			
Minor	18			
Total to Graduate	120			



Department of Mathematics and Statistics

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