

# BACHELOR OF ARTS (B.A.) IN STATISTICS & DATA SCIENCE

**NOTE:** This is a sample plan for the 2025 catalog year; students are expected to meet with department advisors to personalize a plan based on their placements and academic needs.

Big data is changing the world. Offered through the Department of Mathematics, this degree prepares you to take part in the data revolution. Students earning a **Bachelor of Arts in Statistics and Data Science** will have a solid foundation in mathematics. Yet they focus on the capture, maintenance, processing, analysis and communication of data through immersion in courses in probability, statistics, data science and computer programming. Undergraduates also must complete a minor outside the Department of Mathematics.

Freshman Year			
Fall		Spring	
MATH 122A Functions for Calculus	1	MATH 129 Calculus II	3
MATH 122B First-Semester Calculus	4	ENGL 102 - First Year Writing 2 (GE Foundation Composition)	3
ENGL 101 - First Year Writing 1 (GE Foundation Composition)	3	Python Programming Course ex. CSC 110 Intro to Computer Programming I	4
GE Core: Exploring Perspectives or Building Connections	3	<sup>2</sup> DATA 201 - GE Core: (Building Connections)	3
GE Core: Exploring Perspectives or Building Connections	3	GE Core: Exploring Perspectives or Building Connections	3
Introduction to the General Education Experience (Entry Course)	1		
First-Year Colloquium (optional) ex. DATA 195M	1		
Total 16 Units		Total 16 Units	
Sophomore Year			
Fall		Spring	
MATH 263 Introduction to Statistics and Biostatistics	4	DATA 363 Intro Statistical Method	3
ISTA 322 Data Engineering	3	<sup>3</sup> Linear Algebra Course ex. MATH 313 Intro to Linear Algebra	3
GE Core: Exploring Perspectives or Building Connections	3	GE Core: Exploring Perspectives or Building Connections	3
GE Foundation Second Language (First Semester)	4	GE Core: Exploring Perspectives or Building Connections	3
		GE Foundation Second Language (Second Semester)	4
Total 14 Units		Total 16 Units	
Junior Year			
Fall		Spring	
DATA 375 Intro to Statistical Computing	3	DATA 474 Intro to Statistical Machine Learning	3
Major elective ex. ISTA 320 Applied Data Visualization	3	Major elective ex. PHIL 206 Ethics of AI	3
Minor course	3	Minor course	3
GE Foundation Second Language (Third Semester)	4	GE Foundation Second Language (Fourth Semester)	4
General Education Portfolio (Exit Course)	1	General Elective	3
Total 14 Units		Total 16 Units	
Senior Year			
Fall		Spring	
DATA 467 Intro to Applied Linear Models	3	Major elective ex. DATA 439 Statistical Natural Language Processing	3
DATA 498D Capstone: Data Science	3	Minor course	3
Minor course	3	Minor course	3
Minor course	3	General Elective	3
General Elective	3	General Elective	1
Total 15 Units		Total 13 Units	

**This degree program requires at least 120 total units, including 42 upper division units (300-400 level)**

- 1 MATH 122A and MATH 122b are a single-semester sequence of courses that cover Calculus I
- 2 DATA 201 is a new building Connections Gen Ed. Up to 3 courses may count to fulfill General Education Exploring Perspectives or Building Connections requirements as well as major, pre-major, minor, and/or certificate requirements
- 3 Students who have transfer credit equivalent to MATH 215 may use it to fulfill this requirement, though they will not earn upper-division credit for the course