MAJOR IN STATISTICS

Requirements
Effective Fall 2025

A minimum grade of C (2.000) is required in each CS, DSCI, MATH, and STAT course required for the major.

Freshman

		AUCC	Credits
CO 150	College Composition (GT-CO2)	1A	3
STAT 158	Introduction to R Programming		1
STAT 192	First-Year Seminar in Statistics		1
STAT 315	Intro to Theory and Practice of Statistics		3
Select one course from the following:			2-4
CS 150A	Culture and Coding: Java (GT-AH3)	3B	
CS 150B	Culture and Coding: Python (GT-AH3)	3B	
CS 152	Python for STEM		
CS 163	CS1---No Prior Programming Experience		
CS 164	CS1--Computational Thinking with Java		
Select one course sequence from the following:			4-8
MATH 156	Mathematics for Computational Science I (GT-MA1)	1B	
MATH 160 & MATH 161	Calculus for Physical Scientists I (GT-MA1)	1B	
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)		1C	3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Electives			4-10
	Total Credits		**30**

Sophomore

STAT 341	Statistical Data Analysis I		3
STAT 342	Statistical Data Analysis II		3
Select one course from the following:			2-4
CS 220	Discrete Structures and the Applications		
MATH 235	Introduction to Mathematical Reasoning		
Select one course from the following:			4
MATH 256	Mathematics for Computational Science II		
MATH 261	Calculus for Physical Scientists III		
Select one course from the following:			3-4
DSCI 369	Linear Algebra for Data Science		
MATH 369	Linear Algebra I		
Select one course from the following:			3
CO 300	Writing Arguments (GT-CO3)	2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	
CO 301C	Writing in the Disciplines: Social Sciences (GT-CO3)	2	
JTC 300	Strategic Writing and Communication (GT-CO3)	2	
Biological and Physical Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)		3A	7
Electives			2-5
	Total Credits		**30**

Junior

STAT 420	Probability and Mathematical Statistics I		3
STAT 430	Probability and Mathematical Statistics II	4A	3
STAT 472	Statistical Research--Design, Data, Methods	4A,4B,4C	3
Upper-Division STAT/DSCI/MATH/CS Elective[1]			3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	6
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)		3C	3
Electives			9
	Total Credits		**30**

Senior

Upper-Division STAT/DSCI/MATH/CS Electives[1]			6
400-Level STAT Electives[2]			6
Electives[3]			18
	Total Credits		**30**
	Program Total Credits:		**120**

1 Select upper-division (300- to 400-level) statistics, data science, mathematics, or computer science (excluding STAT 301, STAT 307, and courses ending in -82 to-99). Students may also select ECON 435 or ECON 436 to apply to this category.

2 Select 400-level Statistics courses (excluding courses ending in -82 to-99). Students may also select DSCI 445 to apply to this category.

3 Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).