MAJOR IN STATISTICS

Major Completion Map

Distinctive Requirements for Degree Program:

To Prepare for First Semester: The Curriculum for the Statistics Major assumes students enter college prepared to take calculus. Entering students who are not prepared to take calculus will need to fulfill pre-calculus requirements in the first semester. A minimum grade of C (2.000) is required in all CS, DSCI, MATH, and STAT courses which are required by the major.

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)		X	1A	3
STAT 192	First-Year Seminar in Statistics				1
Select one course from the following:		X			4
MATH 156	Mathematics for Computational Science I (GT-MA1)			1B	
MATH 160	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
	Total Credits				**14**

Semester 2		Critical	Recommended	AUCC	Credits
If MATH 160 selected in first semester:					
MATH 161 (MATH 161 is not needed for students who selected MATH 156 in first semester)	Calculus for Physical Scientists II (GT-MA1)		X	1B	0-4
STAT 158	Introduction to R Programming	X			1
STAT 315	Intro to Theory and Practice of Statistics		X		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		X		
CS 163	CS1---No Prior Programming Experience		X		
CS 164	CS1--Computational Thinking with Java		X		
Electives					4-10
	Total Credits				**16**

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
STAT 341	Statistical Data Analysis I		X		3
Select one course from the following:					3-4
DSCI 369	Linear Algebra for Data Science				
MATH 369	Linear Algebra I				
Biological and Physical Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)				3A	4
Electives					2-5
	Total Credits				**13-15**

Semester 4		Critical	Recommended	AUCC	Credits
STAT 342	Statistical Data Analysis II	X			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:			X		4
MATH 256	Mathematics for Computational Science II				
MATH 261	Calculus for Physical Scientists III				
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	3
STAT 341 and STAT 342 must be completed by the end of Semester 4.			X		
	Total Credits				**15-17**
Junior					
Semester 5		**Critical**	**Recommended**	**AUCC**	**Credits**
STAT 420	Probability and Mathematical Statistics I				3
STAT 472	Statistical Research--Design, Data, Methods			4A,4B,4C	3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
Elective					3
	Total Credits				**15**
Semester 6		**Critical**	**Recommended**	**AUCC**	**Credits**
STAT 430	Probability and Mathematical Statistics II			4A	3
Upper-Division STAT/DSCI/MATH/CS Elective					3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Electives					6
STAT 420 and STAT 430 must be completed by the end of Semester 6.			X		
	Total Credits				**15**
Senior					
Semester 7		**Critical**	**Recommended**	**AUCC**	**Credits**
Upper-Division STAT/DSCI/MATH/CS Elective					3
400-Level STAT Elective					3
Electives					9
	Total Credits				**15**
Semester 8		**Critical**	**Recommended**	**AUCC**	**Credits**
Upper-Division STAT/DSCI/MATH/CS Elective			X		3
400-Level STAT Elective			X		3
Electives			X		9
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.			X		
	Total Credits				**15**
	Program Total Credits:				**120**