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
MATH 160	Calculus for Physical Scientists I (GT-MA1)		X	1B	4
STAT 192	First-Year Seminar in Statistics	X			1
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)				1C	3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)				3D	3
	Total Credits				**14**

Semester 2		Critical	Recommended	AUCC	Credits
MATH 161	Calculus for Physical Scientists II (GT-MA1)		X	1B	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					4-6
	Total Credits				**16**

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
MATH 261	Calculus for Physical Scientists III		X		4
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 (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)				3A	4
	Total Credits				**14-15**

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 their Applications				
MATH 235	Introduction to Mathematical Reasoning				
Select one course from the following:					3
CO 300	Writing Arguments (GT-CO3)			2	
JTC 300	Strategic Writing and Communication (GT-CO3)			2	
Biological and Physical Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)				3A	3
Electives					2-5
STAT 341 and STAT 342 must be completed by the end of Semester 4.		X			
	Total Credits				**15-16**

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 (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
Electives					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 (http://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**