Colorado State University STATISTICS MAJOR

Undergraduate Advisor: Ben Prytherch	Room 213 Statistics	Phone: (970) 491-3899	E-mail: prytherc@stat.colostate.edu
Program Coordinator: Marty Sweeney	Room 102 Statistics	Phone: (970) 491-5269	E-mail: martin.sweeney@colostate.edu

ALL UNIVERSITY CORE CURRICULUM		STATISTICS CORE		UNRESTRICTED ELECTIVES
(AUCC)		(Grade of C or higher required in all Mathematics,		
		Computer Science, Statistics courses in this column)		(22, 28 and its)
(28 Cred	iits)	(34-39 credits)		(55-58 credits)
WRITING	6	MATHEMATICS 17-20		total credits earned is at least 120
CO 150 College Composition	[3]	MATH 156 Math for Computational Science I	[4]	
and one of:		or		GRADUATION REQUIREMENTS
JTC 300 Strategic Writing and Comm.	[3]	MATH 160 Calc for Physical Scientists I	[4]	-
CO 300 Writing Arguments	[3]	MATH 161 Calc for Physical Scientists II	[4]	Total credits
CO 301C Writing in the Disciplines: Science	[3]	MATH 256 Math for Computational Science II	[4]	(at least 120 credits)
	[9]	MATH 261 Calc for Physical Scientists III	[4]	(at least 42 credits)
BIOLOGICAL / PHYSICAL SCIENCES	<u>7</u>	and one of:		CSU GPA []
Select two courses from Category 3-A, one of which	1	MATH 369 Linear Algebra I	[3]	(at least 2.0)
MUST have a formal Lab.		DSCI 369 Linear Algebra for Data Science	[4]	
	[]	and one of: CS 220 Discrete Structures and their Arr	[4]	
	[]	MATH 235 Intro to Mathematical Reasoning	[4]	STAT 305 Sampling Techniques
ARTS / HUMANITIES	<u>6</u>	STATISTICAL METHODS	19	STAT 331 Intermediate Applied Statistical
Select two courses from 3-B		Take all of the following:		Methods
	[]	STAT 158 Introduction to R Programming	[1]	STAT 351 Sports Statistics and Analytics I
	гı	STAT 192 First Year Seminar in Statistics	[1]	STAT 400 Statistical Computing
	IJ	STAT 315 Statistics for Eng & Sci	[3]	STAT 421 Introduction to Stochastic
SOCIAL / BEHAVIORAL SCIENCES	3	STAT 341 Data Analysis I (Fall)	[3]	STAT 440 Bavesian Data Analysis
Select one course from 3-C	<u>.</u>	STAT 420 Probability/ Math Stat I (Fall)	[3]	STAT 451 Sports Statistics and Analytics II
	[]	STAT 430 Probability/ Math Stat II (Spring)	[3]	STAT 460 Applied Multivariate Analysis
		STAT 472 Statistical Consulting (Spring)	[3]	DSCI 320 Optimization Methods in Data
HISTORICAL PERSPECTIVES	<u>3</u>			Science
Select one course from 3-D	۲ I	COMPUTER SCIENCE	<u>3-5</u>	Analysis
	LJ	And take one of the following:	[3]	DSCI 336 Data Graphics and Visualization
DIVERSITY / EQUITY / INCLUSION	<u>3</u>	CS 150R Culture and Coding: Python	[3]	DSCI 445 Statistical Machine Learning
Select one course from 1-C		CS 152 Python for Stem	[2]	DSCI 473 Introduction to Geometric Data
	[]	CS 163 CS1 No Prior Programming Exp.	[4]	Analysis
		CS 164 CS1 Computational Thinking with Java	[4]	DSCI 4/5 Topological Data Analysis CS 320 (recommended for CS minors)
				AlgorithmsTheory and Practice
D I IT' F		STAT/ DSCI/ MATH/ CS ELECTIVES	[0]	CS 420 (recommended for CS minors)
Recommended Time Frame:		Three upper division (300 or 400 level) statistics, data		Introduction to Analysis of Algorithms
1st Veen		science, mathematics, or computer science, excludi	ng	MATH 301 Introduction to Combinatorial
1 ICar: T = T = T = T = T = T = T = T = T = T =		introductory level STAT courses (STAT 301, 307, o	or	Theory
(CS 150A or 150P or 152 or 163 or 164)		315) or courses ending in -80 to -99. (see list at right		MATH 317 Advanced Calculus of One
(CS 150A 01 150D 01 152 01 105 01 104)		for options)	г 1	MATH 331 Introduction to Mathematical
2 nd Vear			ΓΙ	Modeling
STAT 341, STAT 342, (MATH 256 or 261), (D	DSCI		[]	MATH 340 Intro to Ordinary Differential
369 or MATH 369). (CS 220 or MATH 235)			LJ	Equations
	,		[]	MATH 345 Differential Equations
3 rd Year:				MATH 360 Mathematics of Information
STAT 420, STAT 430, STAT 472, 3 credits of		400 LEVEL STAT ELECTIVES	[6]	MATH 450 Introduction to Numerical
upper-division STAT/ DSCI/ MATH/ CS		in -80 to -99). DSCI 445 may also be applied here	ng	Analysis I
4th Year:			[]	
6 credits upper division STAT/ DSCI/ MATH/ CS				
6 credits 400-level STAT			[]	Revised 10/17/2023