MINOR IN STATISTICS

Students with a minor in Statistics will receive training in statistical methods, tailored to the aspect of statistics that they choose to emphasize. The minor has 12 credits of electives, giving lots of flexibility in course choices. Statistical skills are in demand across a wide range of disciplines. A minor in statistics is a valuable complement to many majors in the physical, biological, Earth, social and human sciences. Statistical skills are also in high demand in most private industries and government organizations.

If you are interested a minor in Statistics, please see our advising page (https://statistics.colostate.edu/advising/) or contact our department at stats@stat.colostate.edu.

Requirements
Effective Fall 2023

Students must satisfactorily complete the total credits required for the minor. Minors and interdisciplinary minors require 12 or more upper-division (300- to 400-level) credits.

Additional coursework may be required due to prerequisites.

A minimum grade of C must be achieved in all STAT courses required for the minor in statistics.

Code	Title	Credits
STAT 158	Introduction to R Programming	1
STAT 341	Statistical Data Analysis I	3
STAT 342	Statistical Data Analysis II	3
Select one course from the following:		3
STAT 301	Introduction to Applied Statistical Methods	
STAT 307	Introduction to Biostatistics	
STAT 315	Intro to Theory and Practice of Statistics	
STAT/DSCI or Outside Electives (select at least 6 credits from STAT/DSCI list – see lists below)		12
Program Total Credits:		**22**

Statistics Electives

Code	Title	Credits
DSCI 335	Inferential Reasoning in Data Analysis	3
DSCI 336	Data Graphics and Visualization	1
DSCI 445	Statistical Machine Learning	3
STAT 305	Sampling Techniques	3
STAT 331	Intermediate Applied Statistical Methods	3
STAT 400	Statistical Computing	3
STAT 420	Probability and Mathematical Statistics I	3
STAT 421	Introduction to Stochastic Processes	3
STAT 430	Probability and Mathematical Statistics II	3
STAT 440	Bayesian Data Analysis	3
STAT 460	Applied Multivariate Analysis	3
STAT 472	Statistical Research--Design, Data, Methods	3

Outside Electives

Code	Title	Credits
BIOM 422	Quantitative Systems and Synthetic Biology	3
BIOM 431/ECE 431	Biomedical Signal and Image Processing	3
BZ 350	Molecular and General Genetics	4
BZ 360	Bioinformatics and Genomics	4
CIS 370	Business Analytics	3
CS 220	Discrete Structures and their Applications	4
CS 320	Algorithms--Theory and Practice	3
CS 420	Introduction to Analysis of Algorithms	4
CS 445	Introduction to Machine Learning	4
DSCI 235	Data Wrangling	2
DSCI 320	Optimization Methods in Data Science	3
DSCI 369	Linear Algebra for Data Science	4
DSCI 473	Introduction to Geometric Data Analysis	2
DSCI 475	Topological Data Analysis	2
ECE 303/STAT 303	Introduction to Communications Principles	3
ECE 311	Linear System Analysis I	3
ECE 312	Linear System Analysis II	3
ECON 335/AREC 335	Introduction to Econometrics	3
ECON 435	Intermediate Econometrics	3
ECON 436	Economic Forecasting	3
ERHS 332	Principles of Epidemiology	3
ERHS 430	Human Disease and the Environment	3
ESS 330	Quantitative Reasoning for Ecosystem Science	3
F 321	Forest and Natural Resource Biometry	3
F 422	Quantitative Methods in Forest Management	3
FW 370	Design of Fish and Wildlife Projects	3
FW 401	Fishery Science	3
FW 471	Wildlife Data Collection and Analysis	4
FW 475	Conservation Decision Making	3
HDFS 350	Applied Research Methods	3
MATH 229	Matrices and Linear Equations	2
MATH 331	Introduction to Mathematical Modeling	3
MATH 340	Intro to Ordinary Differential Equations	4
MATH 345	Differential Equations	4
MATH 369	Linear Algebra I	3
MATH 450	Introduction to Numerical Analysis I	3
MECH 231	Engineering Experimentation	3
MECH 417	Control Systems	3
MGT 475	International Business Management	3
MKT 450	Marketing Analytics	3
NR 422	GIS Applications in Natural Resource Management	4
PSY 317	Social Psychology Laboratory	2
PSY 350	Research Design and Analysis II	3
PSY 370	Psychological Measurement and Testing	3

PSY 371	Psychological Measurement and Testing Lab	1
SOC 314	Applications of Quantitative Research	3