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

GRADUATION REQUIREMENTS   22 credits

Total REQUIRED Credits
…………………………………………………….……[9-10]

Total ELECTIVE Credits
…………………………………………………….………...[12]

*NOTE: Students with previous R programming experience may waive STAT 158 with permission from a statistics advisor.

A **MINIMUM** grade of C must be obtained in **ALL** courses.

GROUP A: Introductory Course (Select one)   [3]

___STAT 301 Intro to Applied Statistical Methods	[3]
___STAT 307 Introduction to Biostatistics	[3]
___STAT 315 Intro to Theory and Practice of Statistics	[3]
___STAT 201 General Statistics	[3]
or	
___STAT 204 Statistics with Business Applications	[3]
AND	
___STAT 302A Statistics Supplement	[1]

GROUP B: Core Courses (Must take **ALL** courses)   [7]

___STAT 158 Introduction to R Programming (S)	[1]
___STAT 341 Statistical Data Analysis I (F)	[3]
___STAT 342 Statistical Data Analysis II (S)	[3]

Electives: [12]

See lists below and to the right, select at least 6 credits from the list of statistics and data science electives and up to 6 credits from the list of approved outside electives.

STATISTICS ELECTIVES: **[6]**

Select at least 6 credits from the following:

___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 351 Sports Statistics and Analytics I	[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 451 Sports Statistics and Analytics II	[3]
___STAT 460 Applied Multivariate Analysis	[3]
___STAT 472 Statistical Research--Design, Data, Methods	[3]

ELECTIVE COURSES

This is not meant to be an all-inclusive listing of elective courses. The electives shown below represent a portion of those courses at the 300-400 level that are offered by other departments and that are acceptable in meeting the minor in Statistics. Contact the Statistics Department advisor to inquire about pre-approving other courses.

APPROVED OUTSIDE ELECTIVES: **[6]**

Select up to 6 credits from the following:

___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]