MINOR IN APPLIED DATA SCIENCE

Students with a minor in Applied Data Science will receive essential training in computer science, mathematics and statistics in order to apply methods of modern data science within their major field of study.

Learning Objectives

Upon successful completion, students will be able to:

1. Perform essential data handling practices in python and R.
2. Identify basic mathematical and statistical concepts underpinning modern data science.
3. Perform basic analyses using modern data science software.
4. Interpret and present the results in the context of their major course of study.

Requirements Effective Fall 2020

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.

Code	Title	Credits
CS 152	Python for STEM	2
DSCI 335	Inferential Reasoning in Data Analysis	3
DSCI 369	Linear Algebra for Data Science	4
STAT 158	Introduction to R Programming	1
STAT 301	Introduction to Applied Statistical Methods	3
or STAT 307	Introduction to Biostatistics	
or STAT 315	Intro to Theory and Practice of Statistics	
STAT 341	Statistical Data Analysis I	3
Elective (select a minimum of 6 credits from the list below)		6
Program Total Credits:		**22**

Electives

Code	Title	Credits
AREC 335/ECON 335	Introduction to Econometrics	3
BZ 350	Molecular and General Genetics	4
BZ 425	Conservation and Population Genomics	3
CS 345	Machine Learning Foundations and Practice	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
FW 370	Design of Fish and Wildlife Projects	3
FW 401	Fishery Science	3
FW 455	Principles of Conservation Biology	3
FW 469	Conservation and Management of Large Mammals	3
FW 475	Conservation Decision Making	3
GEOL 454	Geomorphology	4
HDFS 350	Applied Research Methods	3
MKT 410	Marketing Research	3
PSY 250	Research Design and Analysis I	3
PSY 350	Research Design and Analysis II	3
RS 432	Rangeland Measurements and Monitoring	2
SOWK 300	Translational Social Work Research	3
STAT 305	Sampling Techniques	3
STAT 342	Statistical Data Analysis II	3
WR 416	Land Use Hydrology	3