MINOR IN DATA SCIENCE

Requirements
Effective Fall 2023

Additional coursework may be required due to prerequisites.

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.

Code	Title	Credits
CS 201/PHIL 201	Ethical Computing Systems (GT-AH3)	3
CS 220	Discrete Structures and their Applications	4
CS 345	Machine Learning Foundations and Practice	3
or DSCI 445	Statistical Machine Learning	
DSCI 235	Data Wrangling	2
DSCI 369	Linear Algebra for Data Science	4
STAT 158	Introduction to R Programming	1
STAT 341	Statistical Data Analysis I	3
Select one of the following		1-3
STAT 301	Introduction to Applied Statistical Methods	
STAT 302A	Statistics Supplement: General Applications	
STAT 307	Introduction to Biostatistics	
STAT 315	Intro to Theory and Practice of Statistics	
Data Science Minor Electives (select a minimum of 3 credits from the list below) [1]		3-4
Program Total Credits:		**24-27**

Data Science Minor Electives

Code	Title	Credits
CS 320	Algorithms--Theory and Practice	3
CS 435	Introduction to Big Data	4
CS 440	Introduction to Artificial Intelligence	4
CS 445	Introduction to Machine Learning	4
DSCI 320	Optimization Methods in Data Science	3
DSCI 335	Inferential Reasoning in Data Analysis	3
DSCI 473	Introduction to Geometric Data Analysis	2
DSCI 475	Topological Data Analysis	2
STAT 342	Statistical Data Analysis II	3
STAT 440	Bayesian Data Analysis	3
STAT 460	Applied Multivariate Analysis	3

[1] Courses used to satisfy degree (program) requirements outside this minor cannot count toward completing minor *electives*. (I.e. If using a course to complete a major, the student must take a different course for the minor elective.)
For example: A CS student using STAT 342 as a technical elective as part of their CS degree, cannot count this course as a minor elective in the DSCI minor.