

MINOR IN DATA SCIENCE

Students with a minor in Data Science will receive foundational training in modern data science to complement and enhance their major field of study.

Learning Objectives

Upon successful completion, students will be able to:

1. Determine the appropriate method to apply to a given data science problem.
2. Prepare data drawn from disparate sources into a form suitable for analysis.
3. Perform basic data science analyses.
4. Interpret and present the results.

Requirements

Effective Spring 2026

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 165	CS2–Data Structures	4
CS 201/PHIL 201	Ethical Computing Systems (GT-AH3)	3
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 course from the following:		3
CS 345	Machine Learning Foundations and Practice	
DSCI 445	Statistical Machine Learning	
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 445	Introduction to Machine Learning	4
DSCI 320/MATH 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 in their degree program cannot double-count this course as an elective in this minor.