APPLIED STATISTICS AND DATA SCIENCE (MINOR)

The Minor in Applied Statistics and Data Science is closed to new enrollments beginning fall 2025.

This program was approved for students entering the university in the Summer 2025-Spring 2026 catalog year. For more information about catalog year, go to Catalog Year Information (https://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/catalog-year/).

Minor in Applied Statistics and Data Science
Unit: School of Public Health & Information Sciences (http://louisville.edu/sphis/)
Academic Plan Code(s): ASDSMINOR

New admissions to this minor have been suspended until further notice, effective summer 2024.

A demonstrated working knowledge in statistical and data science methods has become a vital component for students in many disciplines such as business, journalism, natural and social sciences, political science, psychology, and public health. As evidenced by nationwide employment statistics, employment prospects, and rates, both demand and compensation for individuals with strong quantitative sciences backgrounds are much higher than graduates with minimal exposure to these areas.

The Applied Statistics and Data Science minor exposes students to several commonly applied statistical methods and data science techniques bolstering and complementing a wide variety of undergraduate majors by enhancing their career opportunities. Students in this program will be trained in data management, analysis, reasoning, and decision making using various types of data.

Program Requirements

The program consists of three required courses and three elective courses, where one of the electives must be a Statistical Computing course (see table below). One of the required courses, PHST 301, may be substituted by an approved equivalent course from another unit.

Admission to the program requires the completion of PHST 200 or MATH 109 or higher with a minimum grade of B-. Eligible students should have at least 30 credit hours with a minimum overall grade point average of 2.0. The program will be open to any undergraduate with these prerequisites. A laptop capable of running basic statistical software is a requirement for coursework in this program.

Code	Title	Hours
Core Courses		
PHST 301	Quantitative Methods in Public Health (or equivalent) [1]	3
PHST 302	Intermediate Statistical Analysis	3
PHST 310	Applied Statistical Regression Models	3
Guided Electives		
Select three of the following courses: [2]		9
PHST 315	Sports Statistics	
PHST 421	Statistical Computing in R [2]	
PHMS 430	Elements of Data Mining	
PHST 431	The Principles of Statistical Learning	
PHST 440	Statisitical Study Design and Research Methods	
PHST 520	Statistical Computing and Data Management with SAS [2]	
Minimum Total Hours		**18**

Students must complete all program coursework with a grade of C-minus or higher.

At least three (3) semester hours of the requirements for a minor must be successfully completed while enrolled in the University of Louisville.

[1] Approved substitutions include: IE 360, MATH 109, PAS 408, PSYC 301, SOC 301, BIOL 350.
[2] Student must complete at least one of PHST 520 or PHST 421.