

# INTERDISCIPLINARY DATA SCIENCES (MINOR)

This program was approved for students entering the university in the Summer 2024–Spring 2025 catalog year. For more information about catalog year, go to Catalog Year Information (<http://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/catalog-year/>).

## Minor in Interdisciplinary Data Sciences

Unit: College of Arts and Sciences (AS) (<https://louisville.edu/artsandsciences/home/>)

Department: Physics and Astrology (<https://louisville.edu/physics/>)

Academic Plan Code(s): PHYSMINIDS

The minor in Interdisciplinary Data Sciences combines foundational knowledge in statistics, scientific programming, and data science applications in astronomy, biology, chemistry, physics, and psychology for exploring applications in natural science and social science disciplines.

To earn the minor, students must take at least 18 credit hours with a minimum of 4 credit hours from Supporting Courses and 3-6 credit hours from each of the other sections.

## Program Requirements

Code	Title	Hours
<b>Core Scientific Programming Courses</b>		<b>3-6</b>
PHYS 275	Introduction to Scientific Computing and Data Analysis	
PHYS 375	Intermediate Scientific Computing and Data Analysis	
PHST 421	Statistical Computing in R	
<b>Core Statistics Courses (Choose at least one)</b>		<b>3-6</b>
MATH 360	Statistical Data Analysis - WR ( <a href="http://catalog.louisville.edu/undergraduate/general-education-requirements/">http://catalog.louisville.edu/undergraduate/general-education-requirements/</a> )	
BIOL 350	Biostatistics	
PSYC 301	Introduction to Social Statistics	
PHST 302	Intermediate Statistical Analysis	
<b>Computational Science Electives</b>		<b>3-6</b>
PSYC 451	Introduction to Computer Programming for Psychology	
PHYS 475	Machine Learning in the Physical Sciences	
PHST 520	Statistical Computing and Data Management with SAS	
PHST 500	Introduction to Biostatistics for Health Sciences I	
<b>Supporting Courses</b>		<b>4-7</b>
MATH 205	Calculus I - QR ( <a href="http://catalog.louisville.edu/undergraduate/general-education-requirements/">http://catalog.louisville.edu/undergraduate/general-education-requirements/</a> )	
MATH 325	Introduction to Linear Algebra	
<b>Minimum Total Hours</b>		<b>18</b>

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