

INTERDISCIPLINARY COMPUTATIONAL SCIENCES (MINOR)

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 Interdisciplinary Computational Sciences

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

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

Academic Plan Code(s): PHYSMINICS

The minor in Interdisciplinary Computational Sciences (ICS) focuses on computational techniques in physics, chemistry, and materials sciences.

Program Requirements

To earn a minor, students must take 18 credit hours.

Code	Title	Hours
Scientific Programming		
PHYS 275	Introduction to Scientific Computing and Data Analysis	3
Computational Science Electives		9
Select three courses from the following:		
PHYS 390	Introductory Computational Physics	
CHEM 450	Introduction to Computational Chemistry and Molecular Modeling	
CHEM 555	Theory and Application of Computational Chemistry	
PHYS 565	Advanced Computational and Numerical Methods in Physics	
Supporting Courses		6
Choose two courses from the following:		
MATH 325	Introduction to Linear Algebra	
MATH 405	Differential Equations	
PHYS 350	Differential Equations for the Physical Sciences	
PHYS 450	Introductory Mathematical Physics	
Minimum Total Hours		18

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