

Fundamentals of Physics Certificate

Overview

Offered by the Department of Physics, the **Certificate in Fundamentals of Physics** provides students the opportunity to build quantitative and modeling skills by learning to analyze physical systems, including data and error analysis as well as dimensional analysis. Students will study physical models using mathematical methods, including coordinate systems, single and multivariate calculus, and vector algebra, and will begin to understand the fundamental principles of physics.

This certificate is open to all students.

Campus Location: Main

Program Code: ST-FPHY-CERT

Undergraduate Contact Information

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Certificate Requirements

All courses listed below have prerequisites. For more information, please check the course descriptions or ask an advisor.

Students desiring a certificate in the Fundamentals of Physics are required to satisfy the following:

Code	Title	Credit Hours
Select one of the following: ¹		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I	
Select one of the following: ¹		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II	
PHYS 2796	Introduction to Modern Physics ²	4
Total Credit Hours		12

¹
An upper level Physics course may be substituted for this requirement with approval of the faculty advisor.

²
PHYS 2796 has a concurrent prerequisite of MATH 2043 or MATH 2943.