

# PHYSICS MINOR

Minor Code: PHY

## Physics Department

SAMC 162

(716) 878-6726

[physics.buffalostate.edu/](https://physics.buffalostate.edu/) (<https://physics.buffalostate.edu/>)

Physics helps students understand the world; it is the most basic and fundamental science. In addition, physics provides the basis of many other sciences, including chemistry, oceanography, seismology, and astronomy (and it can be applied to biology or medical science). The physics minor provides an excellent way for mathematics-minded students to enhance their undergraduate experience.

## Program Requirements

Code	Title	Credit Hours
<b>Required Courses (19-21 credit hours)</b>		
PHY 111 or PHY 107	UNIVERSITY PHYSICS I GENERAL PHYSICS I	5
PHY 112 or PHY 108	UNIVERSITY PHYSICS II GENERAL PHYSICS II	4-5
PHY 213	UNIVERSITY PHYSICS III	3
PHY 214	OPTICS AND HEAT LABORATORY	1
PHY 305	MODERN PHYSICS I	3
PHY 307	MODERN PHYSICS LABORATORY	2
<b>Electives (3 credit hours)</b>		
Select from the following:		3
PHY 306	MODERN PHYSICS II	
PHY 308	OPTICS	
PHY 310	COMPUTATIONAL PHYSICS LABORATORY	
PHY 315	HEAT AND THERMODYNAMICS	
PHY 320	INTRODUCTION TO THEORETICAL PHYSICS	
PHY 323	STATICS	
PHY 324	ELECTRIC CIRCUIT ANALYSIS	
PHY 410	ADVANCED PHYSICS LABORATORY	
PHY 495	SPECIAL PROJECT	
<b>Required credit hours outside the minor (16 credit hours)</b>		
MAT 161 or MAT 162	CALCULUS I APPLIED CALCULUS I CALCULUS II	

or MAT 122 APPLIED CALCULUS II

CHE 111 & CHE 113	FUNDAMENTALS OF CHEMISTRY I and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I
CHE 112 & CHE 114	FUNDAMENTALS OF CHEMISTRY II and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II

<b>Total Credit Hours</b>	<b>19-21</b>
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