

PHYSICS MINOR

Minor Code: PHY

Physics Department

SAMC 162

(716) 878-6726

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
Required Courses (19-21 credit hours)		
PHY 111	UNIVERSITY PHYSICS I	5
or PHY 107	GENERAL PHYSICS I	
PHY 112	UNIVERSITY PHYSICS II	4-5
or PHY 108	GENERAL PHYSICS II	
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
Electives (3 credit hours)		
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	
Required credit hours outside the minor (16-18 credit hours)		
MAT 161	CALCULUS I	
& MAT 163	and USING TECHNOLOGY TO EXPLORE CALCULUS I	

or MAT 162	APPLIED CALCULUS I	
MAT 162	CALCULUS II	
& MAT 164	and USING TECHNOLOGY TO EXPLORE CALCULUS II	
or MAT 163	APPLIED CALCULUS II	
CHE 111	FUNDAMENTALS OF CHEMISTRY I	
& CHE 113	and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	
CHE 112	FUNDAMENTALS OF CHEMISTRY II	
& CHE 114	and LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	
Total Credit Hours		19-21