

OPTICAL PHYSICS OPTION

Select 15 credits ¹	15
Total Hours	114

This option is offered within the following major(s):

- Physics - College of Science (<http://catalog.oregonstate.edu/college-departments/science/physics/physics-ba-bs-hba-hbs>)

Code	Title	Hours
Math		
MTH 251	*DIFFERENTIAL CALCULUS	4
MTH 252	INTEGRAL CALCULUS	4
MTH 253	INFINITE SERIES AND SEQUENCES	4
or MTH 306	MATRIX AND POWER SERIES METHODS	
MTH 254	VECTOR CALCULUS I	4
MTH 255	VECTOR CALCULUS II	4
MTH 256	APPLIED DIFFERENTIAL EQUATIONS	4
MTH 341	LINEAR ALGEBRA I	3
Chemistry		
CH 231	GENERAL CHEMISTRY	5
& CH 261	and *LABORATORY FOR CHEMISTRY 231	
CH 232	GENERAL CHEMISTRY	5
& CH 262	and *LABORATORY FOR CHEMISTRY 232	
CH 233	GENERAL CHEMISTRY	5
& CH 263	and *LABORATORY FOR CHEMISTRY 233	
Physics Core		
PH 211	*GENERAL PHYSICS WITH CALCULUS	5
& PH 221	and RECITATION FOR PHYSICS 211	
PH 212	*GENERAL PHYSICS WITH CALCULUS	5
& PH 222	and RECITATION FOR PHYSICS 212	
PH 213	*GENERAL PHYSICS WITH CALCULUS	5
& PH 223	and RECITATION FOR PHYSICS 213	
PH 315	PHYSICS OF CONTEMPORARY CHALLENGES	3
PH 335	TECHNIQUES OF THEORETICAL MECHANICS	3
PH 365	COMPUTATIONAL PHYSICS LAB	3
& PH 366	and COMPUTATIONAL PHYSICS LAB	
& PH 367	and COMPUTATIONAL PHYSICS LAB	
PH 411	ELECTRONICS	3
PH 422	PARADIGMS IN PHYSICS: STATIC FIELDS	3
PH 423	PARADIGMS IN PHYSICS: ENERGY AND ENTROPY	3
PH 424	PARADIGMS IN PHYSICS: OSCILLATIONS AND WAVES	3
PH 425	PARADIGMS IN PHYSICS: QUANTUM FUNDAMENTALS	3
PH 426	PARADIGMS IN PHYSICS: CENTRAL FORCES	3
PH 427	PARADIGMS IN PHYSICS: PERIODIC SYSTEMS	3
Senior-level Physics		
PH 401	RESEARCH	3
PH 403	^THESIS	3
Select two of the following:		6
PH 431	CAPSTONES IN PHYSICS: ELECTROMAGNETISM	
PH 441	CAPSTONES IN PHYSICS: THERMAL AND STATISTICAL PHYSICS	
PH 451	CAPSTONES IN PHYSICS: QUANTUM MECHANICS	
Optical Physics Electives		

¹ 15 credits of approved upper-division courses in physics or optics at the 400 level or beyond, including at least one laboratory course, which form a coherent set. At least 8 of these credits must be in optics.

* Baccalaureate Core Course (BCC)

^ Writing Intensive Course (WIC)

Option Code: 594