

PHYSICS UNDERGRADUATE MAJOR (BA, BS, HBA, HBS)

All physics majors must complete the following courses:

Code	Title	Hours
Baccalaureate Core		
Select 51 credits		
Required Courses		
CH 231 & CH 261	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 231	5
CH 232 & CH 262	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 232	5
CH 233 & CH 263	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 233	5
MTH 251	*DIFFERENTIAL CALCULUS	4
MTH 252	INTEGRAL CALCULUS	4
MTH 253 or MTH 306	INFINITE SERIES AND SEQUENCES MATRIX AND POWER SERIES METHODS	4
MTH 254	VECTOR CALCULUS I	4
MTH 255	VECTOR CALCULUS II	4
MTH 256	APPLIED DIFFERENTIAL EQUATIONS	4
MTH 341	LINEAR ALGEBRA I	3
PH 211 & PH 221	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 211	5
PH 212 & PH 222	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 212	5
PH 213 & PH 223	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 213	5
PH 315	PHYSICS OF CONTEMPORARY CHALLENGES	3
PH 335	TECHNIQUES OF THEORETICAL MECHANICS	3
PH 411	ELECTRONICS	3
PH 365 & PH 366 & PH 367	COMPUTATIONAL PHYSICS LAB and COMPUTATIONAL PHYSICS LAB and COMPUTATIONAL PHYSICS LAB	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
PH 401	RESEARCH	3
PH 403	^THESIS	3
Select one of the following:		15-22
Bachelor of Science in Physics		
Bachelor of Arts in Physics		
Total credits required for graduation		180

* Baccalaureate Core Course (BCC)

^ Writing Intensive Course (WIC)

Bachelor of Science in Physics

For graduation with a Bachelor of Science degree in Physics under the basic physics option, additional course requirements consist of:

Code	Title	Hours
PH 415	COMPUTER INTERFACING AND INSTRUMENTATION	3
or PH 464	SCIENTIFIC COMPUTING II	
PH 431	CAPSTONES IN PHYSICS: ELECTROMAGNETISM	3
PH 441	CAPSTONES IN PHYSICS: THERMAL AND STATISTICAL PHYSICS	3
PH 451	CAPSTONES IN PHYSICS: QUANTUM MECHANICS	3
PH 481	PHYSICAL OPTICS	4
Select 6 additional credits ¹		6
Total Hours		22

¹ At least 6 additional credits chosen from among the non-blanket Physics courses at the 400-level or beyond, or related courses in another department with the approval of the head undergraduate advisor.

Bachelor of Arts in Physics

To graduate with a Bachelor of Arts degree in Physics, additional course requirements consist of:

Code	Title	Hours
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	
Select 9 credits of approved electives ¹		9
Total Hours		15

¹ The student must complete 9 credits of approved electives in the College of Liberal Arts and must complete or demonstrate proficiency in the second year of a foreign language.

Major Code: 590