

PHYSICS - B.S.

Requisite Courses

Code	Title	Credits
MTH 245	Calculus I	
MTH 246	Calculus II ¹	
MTH 347	Calculus III ²	

Additional coursework in Physics, Mathematics, Computer Science, Biology is recommended. Choices will depend on the specific career plans and interests of the students.

B.S., Physics requirements: 36 Credits

Code	Title	Credits
Course Requirements		
PHY 213	General Physics for the Physical Sciences I ³	3
PHY 223	Project Physics Laboratory I ⁴	1
PHY 214	General Physics for the Physical Sciences II ⁵	3
PHY 224	Project Physics Laboratory II ⁶	1
PHY 301	Modern Physics	3
PHY 303	Electronics Laboratory	1
PHY 397	Research Methods	2
PHY 471	Classical Mechanics	3
PHY 481	Electricity and Magnetism	3
PHY 491	Physics Seminar	1
PHY 497	Directed Independent Research ⁷	1
PHY 499	Research Capstone	1
PHY 511	Physical Optics	3
PHY 512	Optics Laboratory	1
PHY 531	Quantum Mechanics	3
PHY 541	Thermodynamics And Statistical Mechanics	3
Advanced Lecture Elective		
Select three credits from the following:		3
PHY 351	Physics in Medicine	
PHY 353	Introduction to Biological Physics	
PHY 551	Mathematical Physics	
PHY 553	Computational Physics	
PHY 559	Gravitation and Cosmology	
PHY 561	Nuclear Physics	
PHY 571	Condensed Matter Physics	
PHY 587	Laser Physics	
PHY 595	Special Topics	
Total Credits		36

¹ MTH 249 Modeling the Physical World I may be substituted for MTH 246 Calculus II

² MTH 349 Modeling the Physical World II may be substituted for MTH 347 Calculus III

³ PHY 221 Advanced General Physics I:Modeling the Physical World or PHY 201 General Physics for the Life Sciences may be substituted for PHY 213 General Physics for the Physical Sciences I

⁴ PHY 205 General Physics Laboratory I may be substituted for the PHY 223 Project Physics Laboratory I requirement.

⁵ PHY 222 Advanced General Physics II:Modeling the Physical World or PHY 202 General Physics for the Life Sciences II may be substituted for PHY 214 General Physics for the Physical Sciences II

⁶ PHY 206 General Physics Laboratory II may be substituted for the PHY 224 Project Physics Laboratory II requirement.

⁷ No more than 1 credit of PHY 497 Directed Independent Research may be counted toward this requirement