# **Physics**

#### **Program Type**

Major

## **Required Physics Courses**

Course Code	Title	Hours
PHY 201	University Physics I	4
PHY 202	University Physics II	4
PHY 303	Theoretical Physics I	3
PHY 304	Theoretical Physics II	3
PHY 310	Experimental Physics I	1
PHY 311	Experimental Physics II	1
PHY 410	Electronics	3
PHY 421	Mechanics	3
PHY 451	Thermal Physics	3
PHY 460	Electricity and Magnetism	3
PHY 490	Quantum Mechanics I	3
PHY 575	Senior Thesis	1
	Sub-Total Credits	32

#### Choose one course from:

Course Code	Title	Hours
PHY 470	Advanced Experimental Physics: Mechanics and Light	1
PHY 471	Advanced Experimental Physics: X-Ray and Nuclear Physics	1
PHY 472	Advanced Experimental Physics: Electricity and Magnetism	1
PHY 480	Research in Magnetism	1
	Sub-Total Credits	1

#### Choose one course from:

Course Code	Title	Hours
PHY 507	Nuclear and Atomic Physics	3
PHY 509	Light	3
PHY 511	Quantum Mechanics II	3
PHY 520	Solid State Physics	3
	Sub-Total Credits	3

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### **Other Required Courses**

Course Code	Title	Hours
CHM 201	General Chemistry I	4
CHM 202	General Chemistry II	4
MTH 120	Calculus I	4
MTH 220	Calculus II	4
MTH 320	Multivariable Calculus	4
	Sub-Total Credits	20

At least 36 hours of physics courses and 20 hours of cognate courses are required. The Graduate Record Exam (GRE) comprehensive physics test and the ETS Physics Assessment Test are also required. An acceptable score on the GRE physics test must be received by April 15 of the senior year. The ETS Physics Assessment Test will be given by the Department during the major's senior year. Physics seniors also complete the Senior Survey. Physics course times are usually scheduled or arranged to allow interested physics majors to complete a second major.

The senior thesis topic should be determined and submitted to the Department for approval by the end of the junior year preferably or earlier. Physics 480 or discussions with faculty members will help in the choice of a topic. During the first semester of the senior year, the student should take Physics 597 and carry out the proposed research. Physics 575 should then be taken during the second semester of the senior year for defending the research results and the actual writing of the thesis.

A senior year comprehensive examination is also required.

Total Credits 56	
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