

# Minor in Engineering Physics

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## Minor in Engineering Physics

### Required Courses - 7.0 credits

PHGN200	PHYSICS II-ELECTROMAGNETISM AND OPTICS	4.0
PHGN300	PHYSICS III-MODERN PHYSICS I	3.0
or PHGN310	HONORS PHYSICS III-MODERN PHYSICS	

### Elective Courses (select at least 11 credits from the following)

PHGN215	ANALOG ELECTRONICS	4.0
PHGN315	ADVANCED PHYSICS LAB I	2.0
PHGN317	SEMICONDUCTOR CIRCUITS- DIGITAL	3.0
PHGN324	INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS	3.0
PHGN326	ADVANCED PHYSICS LAB II	2.0
PHGN384	FIELD SESSION TECHNIQUES IN PHYSICS	1-6
PHGN399	INDEPENDENT STUDY	1-6
PHGN417	FUNDAMENTALS OF QUANTUM INFORMATION	3.0
PHGN419	PRINCIPLES OF SOLAR ENERGY SYSTEMS	3.0
PHGN422	NUCLEAR PHYSICS	3.0
PHGN424	ASTROPHYSICS	3.0
PHGN433	BIOPHYSICS	3.0
PHGN435	INTERDISCIPLINARY MICROELECTRONICS PROCESSING LABORATORY	3.0
PHGN466	MODERN OPTICAL ENGINEERING	3.0

## Minor in Physics

### Required Courses (13.0 credits)

PHGN200	PHYSICS II-ELECTROMAGNETISM AND OPTICS	4.0
PHGN300	PHYSICS III-MODERN PHYSICS I	3.0
or PHGN310	HONORS PHYSICS III-MODERN PHYSICS	
MATH332	LINEAR ALGEBRA	3.0
PHGN311	INTRODUCTION TO MATHEMATICAL PHYSICS	3.0

### Elective Courses (select at least 5.0 credits from the following)

PHGN320	MODERN PHYSICS II: BASICS OF QUANTUM MECHANICS	4.0
PHGN341	THERMAL PHYSICS	3.0
PHGN350	INTERMEDIATE MECHANICS	4.0
PHGN361	INTERMEDIATE ELECTROMAGNETISM	3.0
PHGN418	GENERAL RELATIVITY	3.0
PHGN423	PARTICLE PHYSICS	3.0
PHGN440	SOLID STATE PHYSICS	3.0
PHGN450	COMPUTATIONAL PHYSICS	3.0

## Primary Contact

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<https://physics.mines.edu/>