

The Physics Minor
Associate Professor: Stuart Hutton
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The Physics minor is a course of study designed as a second field for students who wish to develop a deeper understanding of Physics.

Summary of Requirements for a Minor in Physics

MTH 210, 220 Calculus I* & II	8 credits
PHY 210/211 General Physics I*	
OR PHY 240/241 Fundamentals of Physics I*	4 credits
PHY 220/221 General Physics II	
OR PHY 250/251 Fundamentals of Physics II	4 credits
PHY 335 Modern Physics	3 credits
Additional 300 or 400 level Physics courses	4 credits
Total	23 credits

* This course may also be used to satisfy Core requirements.

Physics Courses

PHY 210 GENERAL PHYSICS I / 3 credits

Newtonian mechanics, sound propagation, heat transfer, and thermodynamics using algebra and trigonometry. Prerequisite: MTH 110 or permission of instructor.

PHY 211 GENERAL PHYSICS I LABORATORY / 1 credit

Experimental techniques for Physics I. Corequisite: PHY 210.

PHY 220 GENERAL PHYSICS II / 3 credits

Study of electricity, magnetism, light and optics using algebra and trigonometry. Prerequisite: PHY 210.

PHY 221 GENERAL PHYSICS II LABORATORY / 1 credit

Experimental techniques for Physics II. Corequisite: PHY 220.

PHY 235 INTRODUCTION TO DIGITAL LOGIC / 3 credits

An introduction to digital electronic circuits and techniques. Boolean Algebra, digital logic gates, registers, automata theory, and integrated circuits. Prerequisite: MTH 101.

PHY 240 FUNDAMENTALS OF PHYSICS I / 3 credits

Principles of Newtonian mechanics, sound propagation, heat transfer, and thermodynamics employing differential and integral calculus. Prerequisite: MTH 210 or permission of instructor.

PHY 241 FUNDAMENTALS OF PHYSICS I LABORATORY / 1 credit

Experimental techniques for Fundamentals of Physics I. Corequisite: PHY 240.

PHY 250 FUNDAMENTALS OF PHYSICS II / 3 credits

Study of the basic principles of electromagnetism, light propagation, optics employing differential and integral calculus. Prerequisite: MTH 220 and either PHY 210 or PHY 240 or permission of instructor.

PHY 251 FUNDAMENTALS OF PHYSICS II LABORATORY / 1 credit

Experimental techniques for Fundamentals of Physics II. Corequisite PHY 250.

PHY 282 SPECIAL TOPICS IN PHYSICS / 3 credits

Study of selected topics in physics. Prerequisites will vary.

PHY 321 INDEPENDENT STUDY / 1-3 credits

Directed study on an individual basis covering topics from advanced physics. Prerequisite: PHY 210/240, PHY 220/250 and permission of the instructor. Course may be repeated for up to 3 credits.

PHY 335 MODERN PHYSICS / 3 credits

Topics in Modern Physics including relativity, elementary particles, quantum mechanics, wave and particle theories, and spectra. Prerequisite: PHY 220 or PHY 250 or permission of instructor.

PHY 382 SPECIAL TOPICS IN PHYSICS / 3 credits

Study of selected topics in physics. Prerequisites will vary.

PHY 390 SEMINAR IN PHYSICS / 1 credit

Students research areas from advanced physics and deliver oral presentations supported by a formal paper. Prerequisite: MTH 220 and either PHY 220 or PHY 250 or permission of instructor. Course may be repeated for credit once.