

# Physics Minor

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Students may complete a minor in physics with the flexibility of emphasis on classical physics, modern physics, or a combination of the two areas. The following physics courses are required:

PHYSICS 1099	Windows on Physics	1
PHYSICS 2111	Physics: Mechanics and Heat	4
PHYSICS 2112	Physics: Electricity, Magnetism, and Optics	4
PHYSICS 3200	Mathematical Methods of Theoretical Physics	3
Select two additional emphasis courses from the following:		6
PHYSICS 3221	Mechanics	
PHYSICS 3223	Electricity and Magnetism	
PHYSICS 3231	Introduction to Modern Physics I	
PHYSICS 4310	Modern Electronics	
<b>Total Hours</b>		<b>18</b>

A GPA of at least 2.0 is required in courses presented for a minor. It is required that a student completes a minimum of 6 hours of graded work in 2000 level or above courses on the UMSL campus.

## Program Purpose

The purpose of the Minor in Physics at the University of Missouri at St. Louis is to provide students with a core knowledge of physics concepts to complement their major degree program.

## Learning Outcomes

- Students will be able to demonstrate an understanding of basic physics concepts such as classical mechanics, electricity and magnetism, modern physics, and modern electronics
- Students will be skilled in problem-solving, critical thinking and analytical reasoning as applied to scientific problems
- Students will be proficient in both written and oral communication of the results of scientific work
- Students will have the skills necessary to identify possible errors in scientific data, and to assess the significance of observed results