

PHYSICS (M.S.)

<https://ceps.unh.edu/physics-astronomy/program/ms/physics>

Description

The Physics M.S. program prepares students for a career in industry, education, or government. The curriculum encompassing core areas of physics as well as elective classes that can be chosen to match their area of interest. The M.S. degree includes a capstone experience, which can be a Master's Thesis or a Master's project (for students in the PhD program, the oral thesis proposal satisfies the capstone requirement).

For more details, please consult the physics [graduate student handbook](#).

Applying

Please visit the [Graduate School website](#) for detailed instructions about applying to the program.

Requirements

Degree Requirements

To obtain the degree, students must complete a minimum of **30 credits** as outlined below.

Code	Title	Credits
Required Courses		
PHYS 805	Experimental Physics (or equivalent demonstrated experimental proficiency)	4
PHYS 931	Mathematical Physics	3
PHYS 939	Classical Mechanics	3
PHYS 941	Electromagnetic Theory I	3
PHYS 943	Quantum Mechanics I	3
PHYS 806	Introduction to Physics Research and Teaching (two semesters)	2
Select one of the following options:		12
Option A-Thesis: 12 additional credits including a 6 credit Master's Thesis PHYS 899 with oral defense		
Option B-Project: 12 additional credits including a Master's Project PHYS 895 (up to 4 credits) with a seminar presentation		
Option C-Exam: 12 additional credits of coursework and passing the written comprehensive and oral qualifying exams (for students in the PhD program only)		

Accelerated Master's

This graduate program is approved to be taken on an accelerated basis in articulation with certain undergraduate degree programs.

[General Accelerated Master's policy](#), note that some programs have additional requirements (e.g. higher grade expectations) compared to the policy.

Please see the [Graduate School website](#) and contact the department directly for more information.

Student Learning Outcomes

Program Learning Outcomes

- Students will master the theoretical concepts in advanced mechanics, electromagnetism, quantum mechanics and statistical mechanics at the graduate level.

- Students will have an advanced understanding of the mathematical methods, both analytical and computational, required to solve complex physics problems at the graduate level.
- Students will be proficient in experimental physics.
- Students will have a specialized knowledge of their chosen field of research in physics at the level of a Masters degree.
- Students will be well prepared for further graduate study in physics and related disciplines.
- Students will be well prepared for advanced careers in a multitude of fields ranging from scientific and technical to financial.
- Students will be able to present advanced scientific ideas effectively in both written and oral form.