

# Physics (MS)

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The Department of Physics offers graduate programs leading to the master of science degree in applied physics or to the master of arts (MA) or master of science (MS) degrees with a variety of opportunities for research. Current research areas include astronomy and astrophysics, biophysics, condensed matter physics, elementary particle physics, and optical physics.

Several centers and institutes are supported by the Office of the Vice President for Research and Innovation (<http://research.uoregon.edu/>): the Institute for Fundamental Science (<http://ifs.uoregon.edu/>), the Materials Science Institute (<http://materialscience.uoregon.edu/>), and the Oregon Center for Optical, Molecular and Quantum Science (<http://omq.uoregon.edu/>). These interdisciplinary institutes maintain a close relationship with the Department of Physics (<https://physics.uoregon.edu/>) as well as related departments.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate mastery of subject content knowledge. Students should gain a deep and broad understanding of physics. This involves a grasp of core concepts beyond the level typically seen in undergraduate education, as well as familiarity with the aims and methods of various subfields of physics. This understanding is typically achieved through combination of coursework and seminars, colloquia, and meetings.

## Physics Major Requirements

Typically this degree is based solely on coursework. Detailed requirements can be found in the Graduate Student Handbook on the department's website. The master's degree program is typically completed in four terms, unless sufficient transfer credits are available, in which case it can be obtained in three.

Candidates must either submit a written thesis **or** take a program of specialized courses.

### Thesis Option

A total of 9 credits must be taken either as PHYS 503 or a combination of PHYS 503 and PHYS 601.

Code	Title	Credits
Select one of the following:		9
PHYS 503	Thesis	
PHYS 503 & PHYS 601	Thesis and Research: [Topic]	

### Specified-Course Option

The specified-courses option requires 40 graded graduate credits in physics with a GPA of at least 3.00 in these courses; 36 of those 40 credits must be selected from a list of courses approved by the department.