

# PHYSICS (PHYS)

Graduate Degree Program  
College: Computer, Mathematical, and Natural Sciences

## Abstract

A fuller picture of the Department of Physics can be found on the department's home page, <http://umdphysics.umd.edu>; only a summary is provided here. The Department of Physics offers graduate courses on general and specialized topics in advanced physics, and has active research programs in many areas of current interest. The various research groups can be browsed at <http://umdphysics.umd.edu/research/research-areas.html>.

## Financial Assistance

The Department offers both teaching and research assistantships. Combined with fellowships in some cases, virtually all Ph.D. students have full financial support for the duration of their graduate studies. In a typical semester, approximately 50 teaching assistants and 160 research assistants work in the Department, while some others are supported by nearby government and industry facilities at which they are doing their research. Summer research stipends for advanced graduate students are customary, and a few summer teaching assistantships are available.

## Contact

**Graduate Admissions**  
**Department of Physics**  
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**Website:** <http://www.umdphysics.umd.edu>

**Courses:** PHYS (<https://academiccatalog.umd.edu/graduate/courses/phys>)

**Relationships:** **Biophysics (BIPH)** (<https://academiccatalog.umd.edu/graduate/programs/biophysics-biph>) **Chemical Physics (CHPH)** (<https://academiccatalog.umd.edu/graduate/programs/chemical-physics-chph>)

## Admissions

### General Requirements

- Statement of Purpose
- Transcript(s)
- TOEFL/IELTS/PTE (international graduate students (<https://gradschool.umd.edu/admissions/english-language-proficiency-requirements>))

### Program-Specific Requirements

- Letters of Recommendation (3)
- GRE Subject (Physics)

- Supplementary Application (<https://gradschool.umd.edu/sites/gradschool.umd.edu/files/uploads/admissionsforms/umdsupplementaryapplicationphys.pdf>)
- Publications/Presentations: If authors exceed 30 leave field blank.

The University of Maryland Department of Physics has a strong national and international reputation, and receives a large number of applications each year from well-qualified students. Consequently, admission to the graduate degree program is quite selective.

Students who enter the graduate program are normally expected to have strong backgrounds in physics, including intermediate-level courses in mechanics, electricity and magnetism, physical optics, quantum physics, and thermodynamics. Prior research experience and strong letters of recommendation are highly valued. Good preparation in mathematics is also desirable, especially for students who may pursue theoretical physics research.

For more admissions information or to apply to the program, please visit our Graduate School website (<https://gradschool.umd.edu/admissions/application-process/step-step-guide-applying>).

## Application Deadlines

Type of Applicant	Fall Deadline
<b>Domestic Applicants</b>	
US Citizens and Permanent Residents	13 Dec
<b>International Applicants</b>	
F (student) or J (exchange visitor) visas; A,E,G,H,I and L visas and immigrants	13 Dec

**Other Deadlines:** Please visit the program website at <http://www.umdphysics.umd.edu>

## Requirements

- Physics, Doctor of Philosophy (Ph.D.) (<https://academiccatalog.umd.edu/graduate/programs/physics-phys/physics-phd>)
- Physics, Master of Science (M.S.) (<https://academiccatalog.umd.edu/graduate/programs/physics-phys/physics-ms>)

## Facilities and Special Resources

Current research in the Department spans an immense range of theoretical and experimental work on the forefront of knowledge, far too large to describe here. Details of current research in the various fields, faculty, and facilities involved can be found at the Departmental web site, <http://umdphysics.umd.edu>.

There are close academic ties with the Institute for Physical Science and Technology on the campus; members of the Institute supervise graduate research and also teach physics courses. Faculty members in the departments of Astronomy and Electrical & Computer Engineering also frequently direct thesis research.

The University of Maryland is located within the metropolitan area of Washington, D.C., where it enjoys the proximity of a large number of outstanding institutions, such as NASA's Goddard Space Flight Center, the Naval Research Laboratory, the National Institute of Standards

and Technology, the Johns Hopkins Applied Physics Laboratory, the Department of Energy, the National Institutes of Health, the Library of Congress, and other federal institutions. The Department works closely with certain research groups at some of these institutions, and a significant fraction of graduate students do their primary research at off-campus facilities, co-directed by a member of the graduate faculty in the Department. In order to facilitate graduate study in the Washington area, the Department of Physics also has adjunct professors from certain government laboratories.