PHYSICS

College of Computer, Mathematical, & Natural Sciences
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Housed within a large, diverse research university, Maryland Physics is one of the largest departments in the nation. Exploring more than 30 fields of physics, our faculty and students work together on some of today's most cutting edge physics research. Our laboratories and theoretical centers consistently generate provocative results, and collaborations with peer institutions, government agencies and private industry open up even more opportunities for discovery. From College Park to the South Pole, the University of Maryland is impacting the field of physics worldwide. Along with a rigorous academic curriculum and an ideal Washington D.C. location, this productive research (https://umdphysics.umd.edu/research.html) program forms the foundation of a first-class educational experience. Our undergraduates are sought after by premier graduate schools and a competitive marketplace; and our graduate students advance to challenging careers in government, industry and academia.

PROGRAMS

Major

- Physics Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/computer-mathematical-natural-sciences/physics/physics-major/)

Minor

- Physics Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/computer-mathematical-natural-sciences/physics/physics-minor/)

ADVISING

Advising for undergraduates is available throughout the year in Room 1309 PHY. For early registration, advising is mandatory; students should check Testudo for their early registration date and email ugrad@physics.umd.edu for information about advising appointments. Students who have been away more than two years may find that due to curriculum changes the courses they have taken may no longer be adequate preparation for the courses required to complete the major. Students in this situation must meet with the departmental advisor to make appropriate plans.

OPPORTUNITIES

Honors Program

Departmental Honors in Physics

The Departmental Honors Program in Physics was established to recognize and encourage independent and creative scholarship in physics by providing superior undergraduate physics majors the opportunity for advanced and intensive study. The central component of departmental honors in physics is participation in undergraduate research. To earn high honors in physics, students must produce and defend an honors thesis/document based on their own research. The committee's decision whether to award high honors will be based on the quality of the thesis and defense. To earn honors in physics, the student must pass an oral exam probing the depth of their understanding of physics from their courses and research involvement or complete an approved graduate level PHYS course with a grade of B or higher.

Requirements for Graduation with Departmental Honors in Physics

1. Have earned a 3.00 or higher overall GPA and a 3.30 or higher GPA for all physics major required courses at graduation time.
2. Complete one of the following research courses PHYS386 , PHYS389, PHYS399 or PHYS499.
3. For High Honors, students must complete a research project with a Physics faculty member and defend a senior thesis or paper based on their original research. A student's defense committee should include the following people: the student's research mentor, the chair of the Physics Honors Program, and an additional Physics faculty member.
4. For "regular" Honors, students must either pass an oral exam given by a committee of at least two Physics faculty members or complete an approved, graduate level PHYS course with a grade of B or higher.

Note: Students who do not meet the criteria in items 1) and 2) above may submit an appeal to the Physics Honors Committee. The Physics Honors Committee may use other considerations (instructor evaluations, research activity, etc.) to award the Honors citation. Students who do not meet the criteria and are not awarded a departmental honors citation will not receive any negative record regarding the Physics Honors Program on any official document.

Student Societies and Professional Organizations

Society of Physics Students (SPS); Sigma Pi Sigma

Scholarships and Financial Assistance

The Office of Student Financial Aid (OSFA) administers all types of federal, state and institutional financial assistance programs and, in cooperation with other university offices, participates in the awarding of scholarships to deserving students. For information, visit: http://financialaid.umd.edu. Departmental scholarships for undergraduates in Physics include the following:

- Angelo Bardasis Memorial Scholarship
- Joseph Helfand Memorial Scholarship in Physics
- Professor William M. MacDonald Physics Scholarship
- Physics PALS Scholarship
- University of Maryland Department of Physics NSF Scholarships in Science, Technology, Engineering and Mathematics

Awards and Recognition

Jerry B. Marion Award

IPST Monroe Martin Prize for Undergraduate Research in Physics

Study Abroad Program

Physics in Florence (https://globalmaryland.umd.edu/offices/education-abroad/program/11619/)