APPLIED PHYSICS (MS)

Graduate School

Program Website (https://www.engineering.cornell.edu/aep/ms-applied-physics/)

CIP: 14.1201 | **HEGIS:** 0919.00 | **NYSED:** 05610

Graduate Field

Applied Physics (https://catalog.cornell.edu/graduate-school/applied-physics/)

Program Description

Graduate study in the field of Applied Physics offers the opportunity to achieve proficiency in physics, mathematics, and applied science. Applied Physics is particularly suitable for students preparing for a scientific career in an area of applied science based on principles and techniques of physics.

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY

A student may choose for specialization and thesis or dissertation research any subject compatible with an approach based on the application of principles of physics and mathematics. Current areas of advanced study and research include applied theoretical physics, biophysics, chemical physics, physics of fluids, nuclear and reactor physics, optics, laser physics, plasma physics, solid-state physics, nanoscience, and space physics.

The two-year Master of Science program offers advanced study and training in three disciplines: Optics, Nanotechnology, and Biotechnology (https://www.engineering.cornell.edu/students/graduate-students/ms-students/). These programs provide valuable training and research and design project experience.

University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (https://registrar.cornell.edu/service-resources/college-registrar-directory/) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

Learning Outcomes

- Broad knowledge in the fundamental areas of Applied Physics and advanced theoretical knowledge and experimental training in a subdiscipline.
- Demonstrate the ability to acquire skills to plan and organize a research or design project.
- Demonstrate the ability to successfully complete a research or design project that advances an area of Applied Physics.
- Demonstrate oral and written communication skills
- Develop a commitment to lifelong learning and professional development.