

# Department of Physics



## Contact Information

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## Introduction

The Department of Physics offers programs that lead to Bachelor of Science, Master of Science, and Doctor of Philosophy degrees. The focus of this department's research includes:

Condensed-matter physics, high-energy physics, Astrophysics and Cosmology, biophysics and soft-matter physics, atomic, molecular, and optical physics, and science education. We have over thirty full-time and adjunct professors, and we are committed to providing students with a high quality learning and research environment to ensure that every student has the opportunity to excel.



## Instructional Objectives

In response to the changing times and the different needs and career plans of students, this department is constantly making adjustments to our courses. In addition to the improvements in the core physics courses and secondary school teacher training program, we are emphasizing career counseling and professional skills, adding more applied science courses such as the Electro-Optical program to foster semiconductor, modern optics, and photonics science and technology professionals. To enhance the research manpower and also help nurture academic and high-tech experts in Taiwan, through the pre-master degree program and direct-admissions Ph.D. program, undergraduate students in this department have the opportunity to obtain a master's degree in five years and a Ph.D. in seven years.

## Degree Requirements

### Undergraduate

General compulsory credits	Compulsory Department Course Credits	Electives Credits		Minimum Requirements for Graduation
		Minimum Department Course Credit Requirement	Optional Credits	
32	60	15	21	128

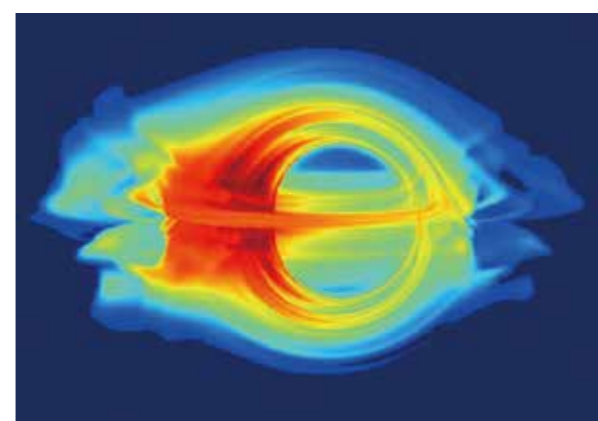
### Compulsory Department Courses

Compulsory Department Courses:

General Physics, General Physics Experiments, General Chemistry, General Chemistry Experiments, Calculus, Application of Computer in Physics, Mechanics, Thermal Physics, Electromagnetism, Experimental Physics, Mathematical Method in Physics, Modern Physics and Optics.

### Graduate (Taught in English)

Master of Science	Doctor of Philosophy (Ph.D.)
Quantum Mechanics (I), (II) 6 credits Statistical Mechanics (I) 3 credits Classical Electrodynamics (I) 3 credits Seminar 3 credits	Quantum Mechanics (I), (II) 6 credits Statistical Mechanics (I) 3 credits Classical Electrodynamics (I), (II) 6 credits Classical Mechanics 3 credits Seminar 3 credits



## Feature of the Curriculum

### Undergraduate

- Research Internship
- Overseas Internship
- Industrial Internship

### Graduate

Major research fields conducted by our faculty members include:

- Condensed-matter physics
- Surface Science, spintronics, and nanoscience
- High-energy physics
- String theory
- Astrophysics and cosmology
- Biophysics and soft-matter physics
- Atomic, molecular, and optics physics
- Science education
- Overseas Internship, Industrial Internship

## Career Prospects

A physics degree is a ticket to a wide range of science, engineering, and technology careers. One of the most common careers for a physics major is a physics teacher. However, our courses combine research-based and hands-on practical education, so our students have access to a variety of career options, such as technical specialists, application engineers, research associates, data analysts, design engineers, IT consultants, lab technicians, laser engineers, optical engineers, software developers, systems analysts, accelerator operators, web developers and high school physics teachers.

