

# PHILOSOPHY AND PHYSICS

This interdisciplinary major combines the core theoretical ideas of a Physics major with the central themes of a Philosophy major. Students of Philosophy and Physics will learn to merge mathematical tools with argumentative writing and to grapple with questions of modern physics that are central to both fields. Graduates of the program offer an unusual and valuable combination of skills to employers in commerce and industry, and are also well prepared to pursue post-graduate studies in any number of related fields.

## BACHELOR OF ARTS (BA) GENERAL OVERVIEW

Six lower-division physics and math courses:

- Calculus II and III for Engineers and Scientists
- Mathematics of Physics and Engineering I
- Advanced Principles of Physics I and II
- Physics Discovery Series

Select courses in the following areas:

- Philosophy Gateway Course (one course)
- Philosophy of Physics (one course)
- Philosophy of Science (one course)
- Logic (one course)

Four upper-division physics and math courses:

- Mathematics of Physics and Engineering II
- Mechanics
- Electricity and Magnetism
- Introduction to Quantum Mechanics and its Applications

Three upper-division elective courses in physics and two in philosophy. Examples include:

- Physical Biology: From Molecules to Cells
- Introduction to Condensed Matter Physics
- The Limits of Logic
- Epistemology and Metaphysics

## ACADEMIC OPPORTUNITIES

**Research:** Philosophy and Physics majors will have an opportunity to work with cutting edge theorists in unraveling the mysteries of quantum mechanics.

**Society of Physics Students:** SPS seeks to create a tight-knit community of those interested in physics & astronomy and to provide opportunities for students to attend lectures and take field trips to sites including the NASA Jet Propulsion Laboratory.

**Study Abroad:** Explore the origins of Western philosophy by spending a year in Athens, while learning about ancient Greek civilization, Byzantine art, and examining cultural trends in modern Greece.

**Honors Program:** Ideal for students planning to continue their studies at the graduate level, or just looking for a more intensive course of study, the Honors program requires a capstone seminar or completion of a senior thesis. Students must also earn a 3.5 or higher in their philosophy courses.