A GUIDE FOR WHAT'S NEXT

Physics

Learning Goals

1. To acquire familiarity with fundamental theories and methodologies in physics.
2. To gain an understanding of physics that is characterized both by depth and breadth.
3. To be able to communicate a knowledge of physics both in written and oral presentations and be adept at presenting ideas conceptually and in specific detail, as demonstrated, for example, through solutions to homework problems.
4. To be able to easily recognize applications of physics, learned in the classroom or lab, and in everyday life.
5. To be able to find, understand, and integrate previous knowledge in approaching a problem, and to also recognize what to ignore.
6. To develop an attitude of empirical enquiry and critical thinking, open-mindedness, and empiricism.

Middlebury College
Center for Careers and Internships

About the major

Physics is the fundamental science; it leads to our most basic understanding of the natural world and of human technological achievements.

The physics program at Middlebury is designed to integrate physics into the liberal arts curriculum, as well as to provide challenging courses and research opportunities for students majoring in physics. Courses and student research activities in astronomy are also part of the physics program.

Course offerings in the Department of Physics reflect the needs of three categories of students: (1) those majoring in physics; (2) those majoring in another science who need a basic introduction to physics and the analytical skills it provides; and (3) those majoring in areas outside the sciences, who seek to explore the concepts of physics with a minimum of mathematics.

Laboratory work is emphasized at all levels of our program, from first-year courses through senior thesis work.

The Department of Physics also conducts weekly "tea times" during the semester so students, faculty, and staff can meet in an informal setting.

> "I was a Physics Major with a concentration in Classics, which to me has been a powerful combination. The complex problem solving skills paired with the ability to communicate articulately has been a major factor throughout my career."
>
> —Chris Coates '86
> *Managing Director, Accenture*

Reasons you might choose this major

- You have an interest in learning about the physical world and are fascinated by the concept of motion through space and time.
- You are good at solving problems and enjoy designing projects, especially those that use complex equipment.
- You like reducing problems to their simplest form and separating cause from effect.
- You have an aptitude for mathematics.
- You want to further develop your knowledge of one of the oldest physical sciences.
- You are interested in a solid foundation in physics and the liberal arts that will allow you to explore any number of career fields.

Translating Learning into Professional Competencies

Throughout your time at Middlebury, you will develop and enhance the following core professional competencies, skills, and dispositions highly valued by employers that will prepare you for leadership and success in any given field:

Critical Thinking: Exercise sound reasoning to analyze issues, make decisions, and overcome problems.

Oral/Written Communications: Articulate thoughts and ideas clearly and effectively in written and oral forms.

Teamwork/Collaboration: Build collaborative relationships with colleagues and customers from diverse backgrounds.

Leadership: Leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others.

Professionalism/Work Ethic: Demonstrate personal accountability and effective work habits.

Global/Intercultural Fluency: Value, respect, and learn from diverse cultures, races, ages, genders, sexual orientations, and religions.

Digital Technology: Leverage existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals.

Career Management: Identify and articulate one's skills, strengths, knowledge, and experiences relevant to career goals, and identify areas necessary for professional development.

Where physics majors go

Applying your learning through internships . . .

Students pursue internships and research in a variety of fields, enabling them to apply their liberal arts learning in real-world settings. Internships, research, and self-directed projects enrich your academic experience and help prepare you for life after Middlebury. Students have interned or done research at the following:

High Sierra Energy Foundation

University of Minnesota PuchnerLab, Cellular and Molecular Biophysics

Makerworks

American Museum of Natural History, Hayden Planetarium

Stanford Rural Education Action Program (China)

Acceleration Capital Group

University of Texas Southwestern Medical School

Global Emergency Care Collaborative

Mallet Japan

Consumer Edge Insight

Industrial Economics

EuroConsult, Inc.

Ecolé Polytechnique

Bank of America Merrill Lynch

NYU Neuroscience Institute

Massachusetts General Hospital

Columbia University

Princeton University Research

National Institutes of Health

GoodPeople.com

. . . leading to meaningful, dynamic, and engaging career paths.

See just some of the many interesting ways our graduates have applied their liberal arts learning to engage the world. If you want to see what other Middlebury alumni are doing now, log into Midd2Midd and search by major. **go/midd2midd**

AeroTEC, *Aerospace Performance Engineer*

International Atomic Energy Agency, *Nuclear Safeguards Inspector*

Karya Capital Management, *Senior Quantitative Analyst*

Forest Laboratories, *Senior Auditor, Batch Record Review*

Synapse Product Development, *Senior Project Manager*

Armu Logistics, *Managing Director*

Verdezyne Inc., *Director of Corporate Strategy and Business Development*

Parthenon, *Vice President*

Amoss Trading Services, *Chief Financial Officer*

KCF Technologies, *Senior Electromechanical Engineer*

NERA Economic Consulting, *Economic Analyst , Securities and Finance*

Witricity Corporation, *Staff Scientist*

Sempra Renewables, *Principal Financial Analyst*

Clarion Healthcare, *Senior Associate*

Revolution Ventures, *Partner*

K2 Sports, *Design Engineer*

Simpleprints, *CEO and Cofounder*

Avanade Inc., *Solution Developer Analyst*

REvsion Energy, *Solar Designer*

IrisVR Inc., *Technical Founder*

Boston Children's Hospital, *Pediatric Cardiologist*

Denver Health, *Pharmacy Technician*