

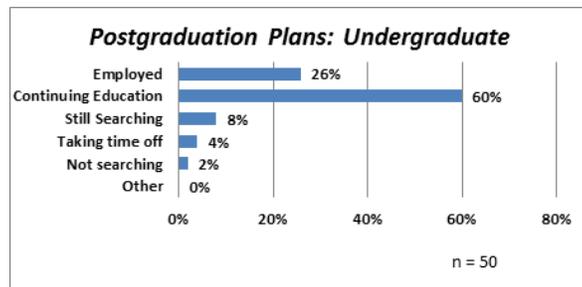
COLUMBIA UNIVERSITY CENTER FOR
Career Education

WHAT CAN YOU DO WITH A DEGREE IN **PHYSICS**?

Where do Physics majors go?

According to the Graduating Student Surveys for 2012–2014 (with a 53.8% response rate for undergraduates in the Physics major), in the last few years:

- 86.0% of graduates were employed or going to graduate school.
 - 26.0% were employed
 - 60.0% had secure plans to attend grad school



Here are some examples of organizations that have hired Columbia Physics majors in recent years:



What jobs do Physics majors do?

A degree in Physics provides knowledge and skills relevant to a wide variety of jobs across the career spectrum, including:

- **Physics Specializations:** Acoustical Physics, Astronomy/Astrophysics, Biophysics, Chemical Physics, Condensed Matter, Engineering Physics, Geophysics, Medical/Health Physics, Nuclear Physics, Optical Physics, Particle/High Energy Physics
- **Industrial Research and Development:** Energy, Transportation, Telecommunications, Nanotechnology, Biotechnology, Medical Devices, Space and Satellites, Defense
- **Healthcare:** Medicine, Dentistry, Optometry, Pharmacy, Veterinary Medicine, Allied Health, Medical Technology, Nuclear Medicine
- **Education:** Teaching (Elementary, Secondary, Post-Secondary), Research
- **Government:** Defense, Aeronautics, Naval Research, Energy
- **Other Professional Opportunities:** Sales, Marketing, Technical Writing, Scientific Journalism, Scientific Illustration, Intellectual Property/Patent Law, Informational Specialists, Consulting

Use CCE's [Industry Exploration](#) webpages to learn more about these, and other fields.

What do employers want?

Most of the skills/qualities sought by employers are transferrable and/or soft skills that students can gain through classes, extracurricular activities, internships, volunteer experiences, or part time jobs including:

1. Ability to work in a team structure
2. Ability to make decisions and solve problems
3. Ability to verbally communicate with persons inside and outside the organization
4. Ability to plan, organize, and prioritize work
5. Ability to obtain and process information
6. Ability to analyze quantitative data
7. Technical knowledge related to the job
8. Proficiency with computer software programs
9. Ability to create and/or edit written reports
10. Ability to sell or influence others

Source: National Association of Colleges and Employers, 2015 Job Outlook

Your major can definitely demonstrate relevant coursework and knowledge to a prospective employer, but your studies aren't the only aspect of your experience that employers are evaluating. They select people who they believe can do the job (have the right skills), want the job (have demonstrated an interest in the field) and are a personality fit for the team and organization.

What value do Physics majors bring?

The Physics curriculum helps you to develop the following skills:

- Gathering information
- Applying theoretical approaches
- Establishing hypotheses
- Defining, analyzing, and solving problems
- Designing and conducting experiments
- Documenting the results of experiments
- Applying mathematical skills and modeling
- Perceiving patterns and structures
- Reading critically
- Creating logical arguments
- Thinking independently
- Seeking and understanding logical sequences
- Communicating complex information through writing or speech

What if I'm an international student?

For international students at Columbia under student visas, selecting your major can play a significant role if you plan to work in the US after completion of your degree. Optional Practical Training is a work authorization that allows an international student to work in a job directly related to the student's major area of study either before or after degree completion. Employer sponsored H1B Visas also have similar strict requirements. Students with more questions about this should visit the International Student & Scholars Office (ISSO) and view CCE's International Students webpage at careereducation.columbia.edu/students/International-Students.