What Does a Physics Major Do for Four Years?

During your physics studies, you can expect to become an expert problem solver, develop creative and critical thinking skills, be challenged intellectually, and gain a deeper understanding of the natural world that surrounds us.

You’ll begin with introductory physics courses. After mastering the basics, you’ll take more advanced classes like quantum mechanics, an experimental lab, and electricity and magnetism. There are also course requirements in other departments to ensure you leave with a solid set of skills in writing, language, and other sciences.

Why Study Physics?

Physics is all about learning to solve problems. As you progress, you’ll find the skills you developed when solving these basic physics problems are transferable to many different aspects of life.

Sure, many students of physics go on to graduate school. However, many take this powerful analytical toolbox to other fields, like law, finance, medicine, and biology. Not only is physics the fundamental science, it’s also a great foundation for many career paths.

Standard Physics

A general physics foundation suitable for all fields of physics and astronomy. Most students pursue this concentration.

Optics & Photonics

Dig deeper into the intricacies of light, lasers, and lenses in this option. CCNY is home to major photonics research labs with many opportunities for undergraduate research.

Materials Science

What are the physical building blocks of modern technology? Find out by studying the physics of the materials that comprise systems such as nano-electronics, metallurgy, and more.

Biomedical physics

Learn how physics can help diagnose and treat diseases and how we use physics to understand the complexities of living systems.

Secondary Education

Interested in helping inspire our nation’s future scientists? City College has a nationally recognized program that will help you get the experience you need to teach physics - a very in demand skill.

Quick Facts

- After graduating, physics majors who obtain STEM positions in the private sector have a median starting salary of $51,000.
- Physics majors do better on the MCATs and LSATs than nearly every other major.
- Those employed in private sector STEM positions indicated high levels of satisfaction with all aspects of their jobs.

What comes next?

About 40% of physics bachelors nationwide go directly to the workforce.

The other 60% of undergraduates go on to graduate school in physics, astronomy, engineering, and more.

Research Opportunities

With many active and renowned researchers on our faculty, there are always opportunities to work in a modern research lab, where there are no solutions manuals and each step you take is one into uncharted territory –

Scary? Somewhat.
Boring? Not a chance!

Get a Master's, a PhD, or a professional degree in:

- Physics
- Astronomy
- Engineering
- Medicine
- Mathematics
- Computer Science
- Law
- Education

Companies in NY that recently hired physics Bachelors

Apple  Lockheed Martin  BlackRock  Bank of America  Google  JP Morgan  Mount Sinai Medical Center  IBM

Having a physics degree opens doors to many jobs: Finance, technology, consulting, medical research. Many other industries welcome physics majors because they have a solid quantitative background, but can also understand big picture issues and tough concepts.
Student Life at CCNY

Whether you hail from one of the five boroughs, a nearby town, or far away lands, you’ll be sure to find a welcoming student body at CCNY. There are many student services offered to help you through school: career counseling, health services, financial aid and tutoring, just to name a few.

We’re located in New York City, where the cultural opportunities are unparalleled. Many students live off-campus. There are on-campus housing options. Whatever you choose, you’ll find CCNY an exceedingly affordable, stimulating, and door-opening school. Also, 80% of CUNY grads finish Debt-Free! Woo-hoo!

The perks of Physics at CCNY

Physics club room / common area
Individual guidance from a physics faculty advisor
Many awards and prizes
Opportunities for tutoring and work study

Too cold to hold: Dr. Baker and Mr. Zhang prepare a transfer of liquid helium into the 4K cryostat. Liquid helium allows physicists to examine materials in the quantum regime, where Newton’s laws don’t apply and only the brave will find the path.

Seeing the light: Not all light is visible to our eyes. Here, Lukas, an undergraduate researcher, aligns a laser beam using special tools.

About CCNY

The City College of New York is the oldest of the CUNY colleges. It also has perhaps the most storied background, having been founded in 1847 as the nation’s first free undergraduate institution. Today, it occupies 36 acres in Harlem on a beautiful Gothic style campus. Our new science building is now open and many of the physics labs are located there. There are currently about 14,000 students enrolled and the student to teacher ratio is 13:1.

Physics at CCNY has a strong history. Three Noble Prize winners in physics studied here as undergraduates!

Current faculty include world renowned scholars, authors, and scientists. You can be a part of this tradition of excellence.

On the cover: The cosmic microwave background (CMB) signal left over from the big-bang.

Albert Einstein after a lecture at CCNY in 1921