Physics Illinois

Undergraduate Programs
The exceptional quality of our programs reflects our strong commitment to undergraduate education. Over the last 15 years, in collaboration with our nationally recognized Physics Education Research Group, our faculty has reinvented the way undergraduate physics courses are taught, with better hands-on curricula, redesigned labs, and innovative educational technologies.

Many of our students take advantage of the various undergraduate research opportunities that, because we are part of a large research institution, we are able to provide. These students broaden their skill sets and gain invaluable experience working in the laboratories of our world class researchers.

The study of physics will give you an understanding of the fundamental rules that govern the physical world on a more intimate and detailed level than any other scientific discipline. Just what you do with this is ultimately up to you. Many of our graduates go on to research and teaching careers in physics. Others apply their understanding of physical systems, mathematics, and computation to solve problems in medicine, engineering, and business.

In order to support the diverse career goals of our students, we have infused our programs with a variety of elective options. We offer four distinct curriculum paths to bachelor’s degrees, one in the College of Engineering and three in the College of Liberal Arts & Sciences.

Each year, we seek out the brightest, most highly motivated and diverse group of rising freshmen—from Illinois, across the U.S., and around the world—to join our Physics Illinois student body. We invite you to check us out and apply.

—Professor Kevin Pitts, high-energy physicist, Assoc. Head for Undergraduate Programs
At the Leading Edge

Physicists study, measure, and manipulate the fundamental interactions of matter, energy, space, and time to solve scientific mysteries, reveal the workings of nature, and expand our knowledge of the universe.

The Department of Physics at the University of Illinois at Urbana-Champaign is a world leader in theoretical and experimental physics research and education, with an illustrious history, a prestigious faculty, and outstanding students.

Research in physics at Illinois is fundamental to the development of today’s technologies, including transistors, semiconductors, and superconductors. Advances in magnetic resonance imaging, the development of computers and supercomputers, applications of radar, and the growth of the Internet have all arisen directly from discovery-driven research at Illinois.

Our students work alongside scientists at the leading edge of discovery and innovation.
Research Opportunities

Physics majors may elect to engage in hands-on research, beyond what is included in the core physics courses. An optional senior thesis for physics majors comprises three semesters of integrated research and instruction. Or, students may apply to faculty members for individual study projects. And finally, students who are eager for an off-campus experience are encouraged to apply for summer internships at other universities, national laboratories (such as Fermilab, Argonne, and Los Alamos), and private companies across the country.

Cutting-edge research at Physics Illinois is focused primarily on condensed matter physics, atomic, molecular, and optical physics, quantum information, astrophysics/cosmology, biological physics, nuclear physics, high-energy physics, and physics education research. Our faculty play leading roles in the Frederick Seitz Materials Research Laboratory, the National Center for Supercomputing Applications, and the Institute for Genomic Biology—all on the U. of I. campus.
Student Life

The department is home to three student-run clubs. Beyond that, the campus is home to more than 1,100 registered student organizations. Whatever your interests beyond physics, you’ll find new friends to share them at Illinois.

Physic(s) Integrals

**Physics Society (Physoc)**
Physoc members share a common interest in physics. Students from a wide range of majors attend meetings to expand their knowledge of physics, to engage in community service, and (sometimes) to blow things up.

**Society for Women in Physics (SWIP)**
SWIP provides opportunities for its members to network with students, faculty, and the community through social, academic, and philanthropic activities. SWIP also reaches beyond our campus to send its members to conferences across the country.

**Physics Van**
Physics Van members travel to local grade schools and other venues to perform fundamental physics demonstrations that have big “wow” factors. Through community outreach, Van members help children to see that science is exciting and fun.
Career-Ready Graduates

An undergraduate degree in physics from the University of Illinois will open doors for you, whatever your career goals. We are ranked among the top ten departments in the U.S. by the National Research Council and are currently ranked number one in the nation in undergraduate engineering physics by U.S. News and World Report. Our faculty includes a Nobel laureate, ten members of the National Academy of Sciences, and thirty-four Fellows of the American Physical Society.

As an undergraduate, you can customize your curricula to fit your own career goals. You may choose from pre-approved elective options or create your own course of study with the approval of an adviser.

About 40 percent of our graduates immediately enter a graduate program in physics intending to pursue a research-related career. Another 30 percent enter graduate school (often a master’s degree program) in other fields. The remaining 30 percent enter directly into careers, finding employment opportunities throughout the world in industry, government, schools and private organizations.
Employers who hired our graduates (2011-2013)

Accenture
Belvedere Trading
Chicago Tech Academy
CISCO Systems
CreateASoft
Crystal Lake Central HS
Department of Defense
Elk Grove HS
Epic
Google
Greenline Financial Technologies
HRL Laboratories
IBM
IMC Financial Markets Asset Management
Inservice Engineering
Intel
Jump Trading
Lake Forest Academy
Olenick & Associates
Qualcomm
Simplex Investments
Studio 222
Twitch, LLC
ULine Shipping Supply Specialists
US Military
ViaSat

Typical Starting Salaries for Physics Bachelor's Classes of 2009 & 2010 Combined

Employer

Private Sector STEM
Civilian Govt. incl. Natl. Labs
Private Sector non-STEM
Active Military
High School Teachers
College or University

Typical Salaries (in thousands of dollars)

Figure includes only bachelor's in full-time, newly accepted positions.

Typical salaries are the middle 50%, i.e. between the 25th and 75th percentiles. STEM refers to positions in natural Science, Technology, Engineering, and Math.

http://www.aip.org/statistics
At Physics Illinois, we believe a diverse faculty and student body bring greater breadth of ideas and wider possibilities for innovation. As a department, we are committed to increasing the enrollment of students from groups that have historically been underrepresented in physics.

**For more information**
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[http://physics.illinois.edu/](http://physics.illinois.edu/)

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Campus Visitors Center  
(217) 333-0824  
email: visits@illinois.edu

**To apply**
Office of Admissions and Records  
(217) 333-0302  
[http://admissions.illinois.edu/apply/app.html](http://admissions.illinois.edu/apply/app.html)

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Printed on recycled paper with soybean ink.