

Cutting-Edge Programs, Smart People, Cool Research

Your Future at Illinois Tech

PHYSICS

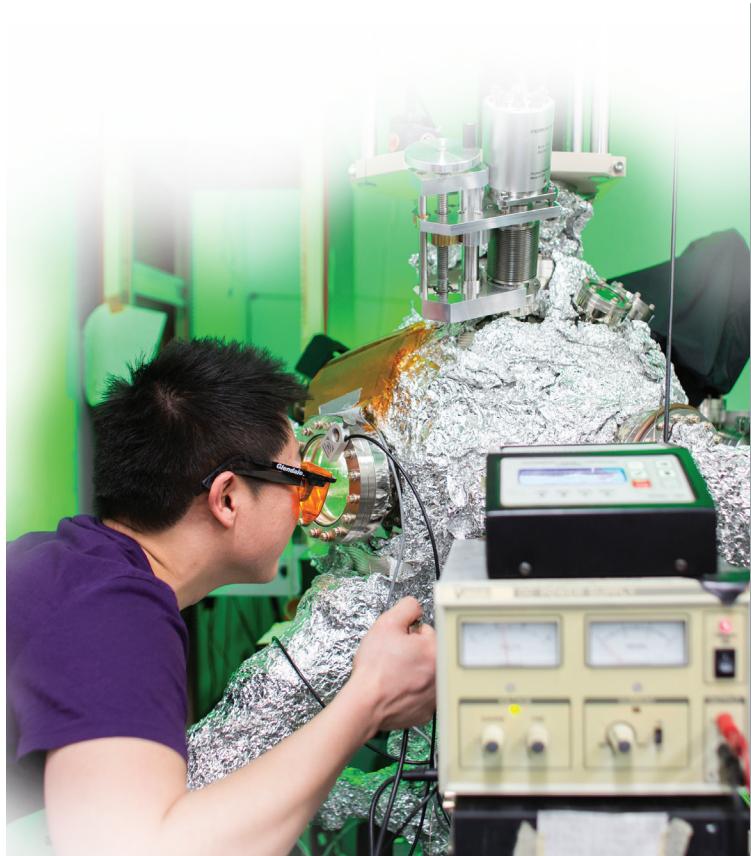
Illinois Tech is a small, private university that educates students to go on to do big things. Similarly, the **Department of Physics** is small, so you have access to your professors; and the approach is hands-on, so you don't just read about it—you do it.

Physics at Illinois Tech is challenging. And when you finish the program, you'll find that many different graduate schools and professional options await. For our physics graduates this has included top graduate schools and jobs at such places as NASA, Google, Microsoft, Target, IBM, and more. That's because when you study physics you learn more than how nature works at its most fundamental levels. You also learn skills that can be used in many other areas—such as **finance, law, business, and engineering**—quantitative skills, analytical-thinking skills, problem-solving skills.

B.S. PROGRAMS IN PHYSICS FIELDS

Receive your bachelor's degree in an area of focus with the greatest interest to you.

- Applied Physics
- Astrophysics
- Physics



RESEARCH—EVEN AS AN UNDERGRAD!

Physics undergraduates at Illinois Tech get the opportunity to work on major research right from the start, including at nearby Argonne and Fermi national laboratories. Our new **Elevate** program consists of summer courses that allow all undergraduates to experience research early in their careers at Illinois Tech (the summer after your first year, or the summer before your first year for transfer students). We also offer **\$5,000 Undergraduate Summer Research Stipends** to select students.

Illinois Tech physics faculty are developing nanoelectrofuel battery technology, exploring the surface conductivity of Nb for reactors, using biophysics to study the molecular basis for muscle physiology, and doing work on the role of accelerator component design and materials on beam dynamics of particle accelerators.

RESEARCH ON THE EDGE

With Ph.D.s from Stanford; the University of Chicago; the University of Cambridge; the universities of California, New York, and Virginia; and other major research universities, our physics faculty include fellows of the American Physical Society, NSF CAREER Award recipients, and recipients of major research funding. They are pushing the boundaries of what we know in many areas, including:

- Elementary particle physics/experimental neutrino physics
- Accelerator physics
- Nuclear reactor physics
- Condensed matter and advanced materials physics
- Synchrotron radiation, X-ray spectroscopy and diffraction
- Experimental and computational biophysics
- Computational physics
- Health physics (radiation protection)

Assistant Professor **Bryce Littlejohn** works to detect and study ghost-like particles called neutrinos—research that enables better understanding of the fundamental physics of the universe.

Assistant Professor **Jeff Wereszczynski** uses large-scale computer simulations to study the mysteries of how living systems function at the molecular level, thereby linking the jiggling and wiggling of atoms to critical life functions such as gene expression.



Maximize Your Education



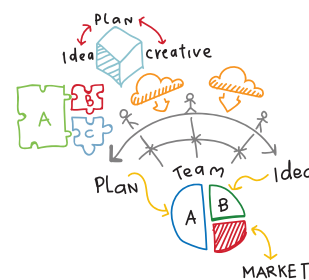
Illinois Tech's accelerated master's degree programs allow you to receive both your **bachelor's and master's degrees** in as few as five years.

- Bachelor of Science in Physics/M.S. in Computer Science
- Bachelor of Science in Physics/M.S. in Health Physics

LEARN TO INNOVATE IN IPROS

In Illinois Tech's signature **Interprofessional Projects (IPRO) Program**, you'll work with students from various majors to solve real-world problems. Recent physics-oriented IPROs include:

- Developing an antimatter gravity interferometer
- Galilean test of the Einstein principle of equivalence
- Developing a new strategy to detect smuggled nuclear material
- Auto engines as combined heat+power systems
- Integrating telescope software control for remote use with the IBM Watson project



STAND OUT.

Our graduates are far from ordinary.
But we expect them to be extraordinary.
Meet some of our alumni.



Aram Apyan
(Physics and Applied Mathematics '11)—Research associate, Fermilab

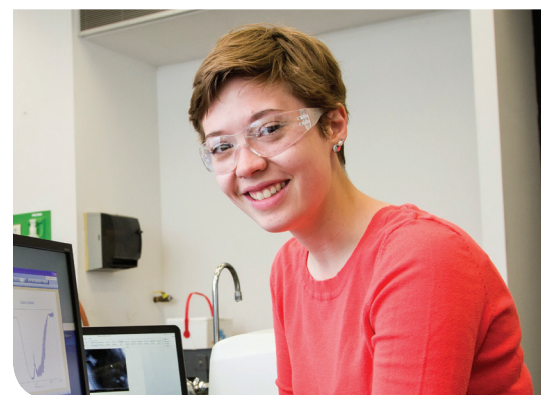


Emily Hommerding
(Physics '13)—Software engineer, Microsoft



James Kapaldo
(Physics '11)—Data scientist, Lowe's Companies

HANDS-ON PHYSICS



TAKE A VIRTUAL TOUR

Visit us now! Log on to iit.edu/virtualtour to view a cool online virtual tour of our buildings, labs, open spaces, and more!



@illinoistech

"The cool thing about physics at Illinois Tech is that the curriculum covers such a variety of subjects, making us really versatile students and workers. When I came to Illinois Tech, one of the first things I was told was companies like physics majors because they know we know how to learn, and that's certainly true. You get enough lab experience to be a competitive applicant for industry internships and funded undergraduate research projects. In my case, I had enough programming experience to secure a job as a full-time software developer months before I graduated. It's challenging but definitely rewarding at the end."

—**Carly Ilg** (Physics '16), Oak Forest, Illinois
Software Engineer, Target Technology Leadership Program