

# ILLINOIS TECH

BE **IT** ALL  
**SCIENCE.**

At Illinois Tech's **College of Science** we view the core sciences as the raw fuel of innovation. Our students gain a deep understanding of science and technology and excel as leaders who create, discover across boundaries, and pursue bold ideas fearlessly.

Distinctive. Relevant. Rigorous.

ILLINOIS INSTITUTE  
OF TECHNOLOGY



**Why study science?** Science underpins everything. It allows us to venture into the unknown. Its discoveries lead to tomorrow's technologies. It is challenging. It gives way to problem-solving skills with wide application, making graduates valuable to diverse employers. It is fundamentally a global collaborative enterprise.

**Why study science at Illinois Tech?** Because it provides you all the benefits of a small school, coupled with major research capacity, and all the benefits of the city of Chicago.

## YOU'RE IN GOOD COMPANY IN THE COLLEGE OF SCIENCE.

The College of Science is a small, private school, but its research is major league. You're in courses taught by more than 100 outstanding full-time faculty who are top scholars in their fields. That's right. By faculty. Not by teaching assistants.

When you graduate, you'll join a network of more than 10,000 alumni who work in business, government, and academic institutions all over the world.

### How good is that?

## SPEND TIME WITH REALLY SMART PEOPLE.

Our faculty are part of a global network of scholars in fundamental and applied science. Our alumni work in places from Silicon Valley to Shanghai. Our bright students come from all over the world. As a student, you'll get access to networks of mentors, colleagues, and a lot of really influential people in your field.

## RIGOR AND RELEVANCE.

These two words define the educational experience you will receive in the College of Science. Our programs are intellectually demanding and provide multiple pathways to the academic, professional, and entrepreneurial worlds. We will give you the tools to solve today's problems and the knowledge to build the new tools to address tomorrow's problems.

## YOUR DEGREE HAS VALUE.

Our graduates are hired by companies with names everyone recognizes: Microsoft, Google, Orbiz, Argonne, Baxter, the Chicago Board of Trade, and Chase, to name just a few. And if you want to go on to earn a graduate degree in your field, you'll be glad to know that our students have been accepted into prestigious programs from Oxford to Princeton.

## CONDUCT RESEARCH THAT MATTERS.

In the College of Science you can work with internationally known faculty on research funded by the National Science Foundation, National Institutes of Health, Department of Energy, Department of Defense, Air Force Office of Scientific Research, and industry. You can intern at local companies, in other U.S. cities, or internationally. Or conduct your own research. Illinois Tech undergraduates can do research at Argonne and Fermilab national laboratories. That's right. Undergraduates. Now that's something special.

**Personalized. That's what education should be.**  
At Illinois Tech one size never fits all.



“After comparing Illinois Tech's Applied Math program with other schools I was interested in, I decided I would learn the most at Illinois Tech. A paper I co-authored with four other students was selected to be presented at the Mathematical Association of America's annual conference. We analyzed the recent Ebola outbreak in West Africa and tried to come up with an optimal solution for how to spend the medical and monetary resources available. Another student and I went to D.C. for the conference and presented our results.”

— James Panek (Applied Mathematics '16/M.S. Candidate), La Grange Park, Illinois

# STAND ON THE LEADING EDGE.



BIOLOGY.  
CHEMISTRY.  
PHYSICS.  
COMPUTER SCIENCE.  
APPLIED MATH.

## UNDERGRADUATE PROGRAMS

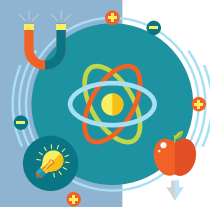
### BACHELOR OF SCIENCE IN:

- Applied Mathematics
- Applied Physics
- Astrophysics
- Bioanalytical Chemistry
- Biochemistry
- Bioinformatics
- Biology
- Biology/Psychology Dual Degree
- Chemistry
- Computational Chemistry and Biochemistry
- Computer Information Systems
- Computer Science
- Environmental Chemistry
- Forensic Chemistry
- Medicinal Chemistry
- Molecular Biochemistry and Biophysics
- Physics

All of the above may be combined with a minor in STEM education, leading to state licensure.

### Our special academic programs include:

- Pre-Medical/Health Professions Program
- Honors Pharmacy



“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 Developer for Target

## 2'FER ADVANTAGE

Earn your bachelor's degree and master's degree in more than 20 different combinations in as few as five years.

### For example:

- Earn a B.S. in Applied Mathematics and an M.S. in Computer Science
- Earn a B.S. in Physics and a Master of Health Physics
- Earn a B.S. in Biology and an M.S. in Biology
- Earn a B.S. in Computer Science and a Professional Master's in Data Science
- Earn a B.S. in Chemistry and a Professional Master's in Food Safety and Technology

... and many more.

See the complete list at  
<http://science.iit.edu/programs/undergraduate/co-terminal-degrees>

Chemistry Professor **Joy Chong** conducts interdisciplinary research projects aimed at developing safe, effective, and targeted drugs for cancer and neurodegenerative diseases. Her lab has developed several promising cancer therapeutic and diagnostic agents with successful preclinical profiles that are favorably compared to the existing cancer drugs.



Computer Science Professor **Aron Culotta** studies socially beneficial applications of natural language processing, machine learning, and text mining algorithms. He has found correlations between Twitter chatter and values such as the influenza rate, alcohol sales volume, and the level of concern regarding an impending hurricane.



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SEVENTEEN UNDERGRADUATE MAJORS

Nearly one in five Illinois Tech students earns a degree from the College of Science.



# RESEARCH ON THE EDGE

Our faculty are pushing the boundaries of what we know in many areas, including:

- Accelerator research
- Big data and data analytics
- Cancer therapeutics
- Computational mathematics
- Computational science
- Cybersecurity
- Discrete applied mathematics
- Distributed systems, cloud, high-end computing
- Information retrieval, data mining
- Materials for organic solar cells and photovoltaic devices
- Nanomaterials for applications in chemical sensing, energy storage, and biomedical usage
- Networks, sensors, and social networks
- Particle physics
- Programmed cell death in cancer cells
- Solar energy conversion, catalysis, electronic materials, and chemical structure and bonding
- Stochastics (including financial mathematics)
- Superconductivity



## STAND OUT.

Our graduates are far from ordinary.  
**But we expect them to be extraordinary.**

**Jacob Matijevic**  
(Math '69) —  
Lead developer  
of the Mars rovers

**Rajeev Chandrasekhar**  
(M.S. Computer Science '88) —  
Co-designed  
Intel's Pentium chip

**Susan Solomon**  
(Chemistry '77) —  
Co-chair of the  
Intergovernmental Panel  
on Climate Change,  
which received the  
2007 Nobel Peace Prize

**Michael Romalis**  
(Physics '93) —  
Princeton University  
physics professor

**Victor Tsao**  
(M.S. Computer Science '80) —  
Founder of Linksys



**Will we add your name to our list?**

[science.iit.edu](http://science.iit.edu)

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