

Cutting-Edge Programs,  
Smart People, Cool Research

FIND IT ALL AT ILLINOIS TECH

## BE IT ALL BIOLOGICAL SCIENCES.

**Illinois Tech** is a small, private university that educates students to go on to do big things. If you love the biological sciences—there is no better place to study than **Illinois Tech**, a university recognized for innovation and achievements in science and technology.

If you're like some of our students, you know you want to work in a biological sciences field—only you might not be sure which major is best for you. At **Illinois Tech** we'll help you find the right path. Here are **three academic majors** that students can choose between, and a bit about each degree program.

### Biology

**A major in biology will provide you with a strong education in the broad areas of modern cell biology, genetics, biochemistry, microbiology, and physiology—supported by a solid foundation in mathematics and the physical sciences—regardless of your career interests.** Illinois Tech's rigorous, interdisciplinary biology program provides excellent preparation for a future in biotechnology, biochemistry and patent law, and environmental science. Or for positions in industrial, medical, and other research laboratories—and for graduate programs in biotechnology, cell biology, biochemistry, genetics, and molecular biology.

### Biochemistry

**Biochemistry could be the major for you if you're interested in both biology and chemistry.** Biochemists work with molecules and compounds, often at a cellular level. They study the way that cells across a variety of biological compounds interact, using this information to make more effective medications, diagnose diseases, and produce healthier food. Biochemists work at pharmaceutical companies, research hospitals, universities, and food-producing companies. Our program provides a thorough preparation if you're looking toward a career as a clinician or researcher, or planning to go to medical school, work in a pharmaceutical firm, or pursue a Ph.D. in molecular biology.

### Bioinformatics

**If you're interested in both biology and computer science, you may consider the study of bioinformatics.** Bioinformaticians develop ways to gather and analyze data for biology research and other purposes. Advances in biology are often impeded by the glut of ever-expanding datasets and by a lack of dedicated software and algorithms, requiring skilled biologists capable of handling massive amounts of information, performing in-depth statistical analyses, and programming. You'll take core courses in biology, plus courses in computer science, math, and physics.

#### We also offer these specializations:

- STEM Education (grades 6–12 certification)
- Pre-Medicine and Pharmacy Concentrations and Dual Admissions Programs
- Honors Law

### Biology/Psychology Double Major

#### B.S. in Biology/B.S. in Psychology

Earn two degrees simultaneously in this challenging program geared toward pre-health students. You'll differentiate yourself when applying to medical school; programs in public health, genetic counseling, or related areas; or graduate programs where biology and psychology intersect (e.g., neuroscience, brain science, and cognitive science).

### Research—Even As an Undergrad!

Undergraduates at Illinois Tech get the opportunity to work on major research right from the start. You might participate in a professor's research lab, work at a company on campus in **University Technology Park**, or apply for an **Undergraduate Summer Research Stipend** in our College of Science. Illinois Tech also has strong partnerships with nearby Argonne National Laboratory, Fermilab, and other leading research institutions and universities.



#### Benjamin Stark

Professor of Biology  
B.S. University of Michigan  
M.Ph. and Ph.D. Yale University

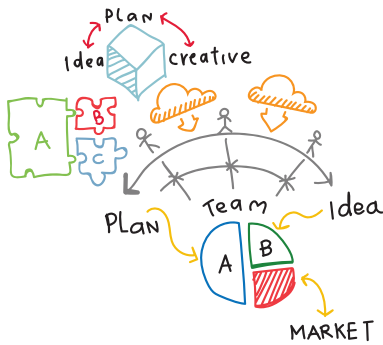


In Stark's lab, he uses both genetic engineering and more conventional microbiology to develop bacterial strains and processes that may help improve biological removal of sulfur from petroleum and increase ethanol production from plant dry matter (biomass) materials.

Stark with others has described how genetic engineering of a certain type of bacteria can enhance production of useful bio-products as well as degradation of toxic chemicals. One aspect of the work may lead to enhanced production of ethanol from biomass.

A popular and award-winning teacher at Illinois Tech, Stark has performed science demonstrations for grade school students in suburban Oak Park for more than 20 years.

He was recently named a fellow of the American Association for the Advancement of Science for contributions to the discovery of catalytic RNA, development of *Vitreoscilla* hemoglobin technology, and education at the university and elementary-school levels.



## Be an Innovator—IPRO and Project-Based Learning

In Illinois Tech's signature **Interprofessional Projects (IPRO) Program**, you'll work with students from various majors to solve real-world problems. This hands-on collaborative experience gives our students a big advantage after graduation.

Recent biological sciences-oriented IPROs include:

- Making an artificial pancreas
- User interfaces for novel computer-aided drug design tools
- Integrating hydroponics into the workplace environment
- Developing teaching modules on ecological separation for Shedd Aquarium
- Terraforming urban soils and use of appropriate food process technologies

## STAND OUT.

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



**Tim Zamb** (BIOL '68, Ph.D. '78)—Leader in the global race to discover a viable AIDS vaccine, headed the AIDS Vaccine Design and Development Laboratory of the International AIDS Vaccine Initiative



**George Langford** (BIOL '69, Ph.D. '71)—Nationally recognized cell biologist and neuroscientist, professor and dean emeritus of Syracuse University's College of Arts and Sciences



“ Studying biochemistry at **Illinois Tech** helped me understand how to think for myself. My professors and classes required me to do more than just regurgitate information. Instead, they pushed me to analyze information, identify trends, and determine conclusions that I could support. These abilities translate into all fields of work, and as a health care consultant, I know that the skills I developed at Illinois Tech were invaluable to my success. ”

— **Raghav Girijala** (Biochemistry '14)  
M.D. Candidate, Texas A&M University

“ The curriculum at **Illinois Tech** encourages students to develop a strong foundation in biological sciences, however, it was the outstanding faculty in the biology department that provided me with an invaluable education. These individuals are not only incredibly knowledgeable in their content, but they are also dedicated to the success of their students both academically and professionally. The support they provided and the opportunities they offered me as I obtained my Secondary Education Certification were paramount to my success teaching abroad and in my current position. ”

— **Melanie Koto** (Biology '12), Museum Educator, Shedd Aquarium



College of Science  
ILLINOIS INSTITUTE OF TECHNOLOGY



## 2'Fer Advantage

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

- Bachelor of Science in Biochemistry/ M.S. in Food Safety and Technology
- Bachelor of Science in Biochemistry/ M.S. in Biology with Biochemistry Specialization
- Bachelor of Science in Biochemistry/ M.S. in Computer Science
- Bachelor of Science in Biology/ M.S. in Biology

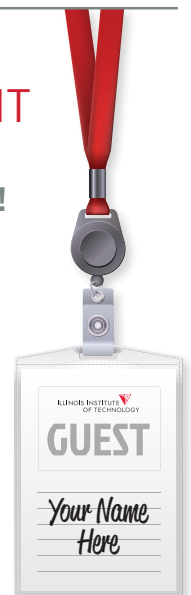
## EXPERIENCE IT

### SEE WHAT HAWK LIFE IS ALL ABOUT!

Throughout the year we host a number of opportunities for you and your family to come check out everything you'd ever want to know about us!

Schedule a campus visit today at [visit.iit.edu](http://visit.iit.edu).

Or send us an email at [admissions@iit.edu](mailto:admissions@iit.edu).



CollegeWeek Live