



The IIT Experience

IIT offers the advantages of a small, private college combined with a major research university.

The IIT education is distinguished by the integration of rigorous learning content, professional perspectives, and applied experiences.

It is distinguished by an educational environment that is personalized, research based, experiential, and internationally diverse.

At IIT, you will also be located in the heart of one of the world's greatest cities, Chicago.



IIT offers the personal touch of a small school. You'll know your professors and they will know you. You can talk to them, get advice, make connections; they can watch your progress, point out opportunities, help you steer your course.

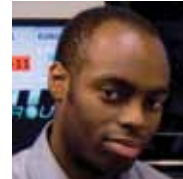
The IIT Legacy in Applied Mathematics



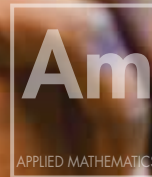
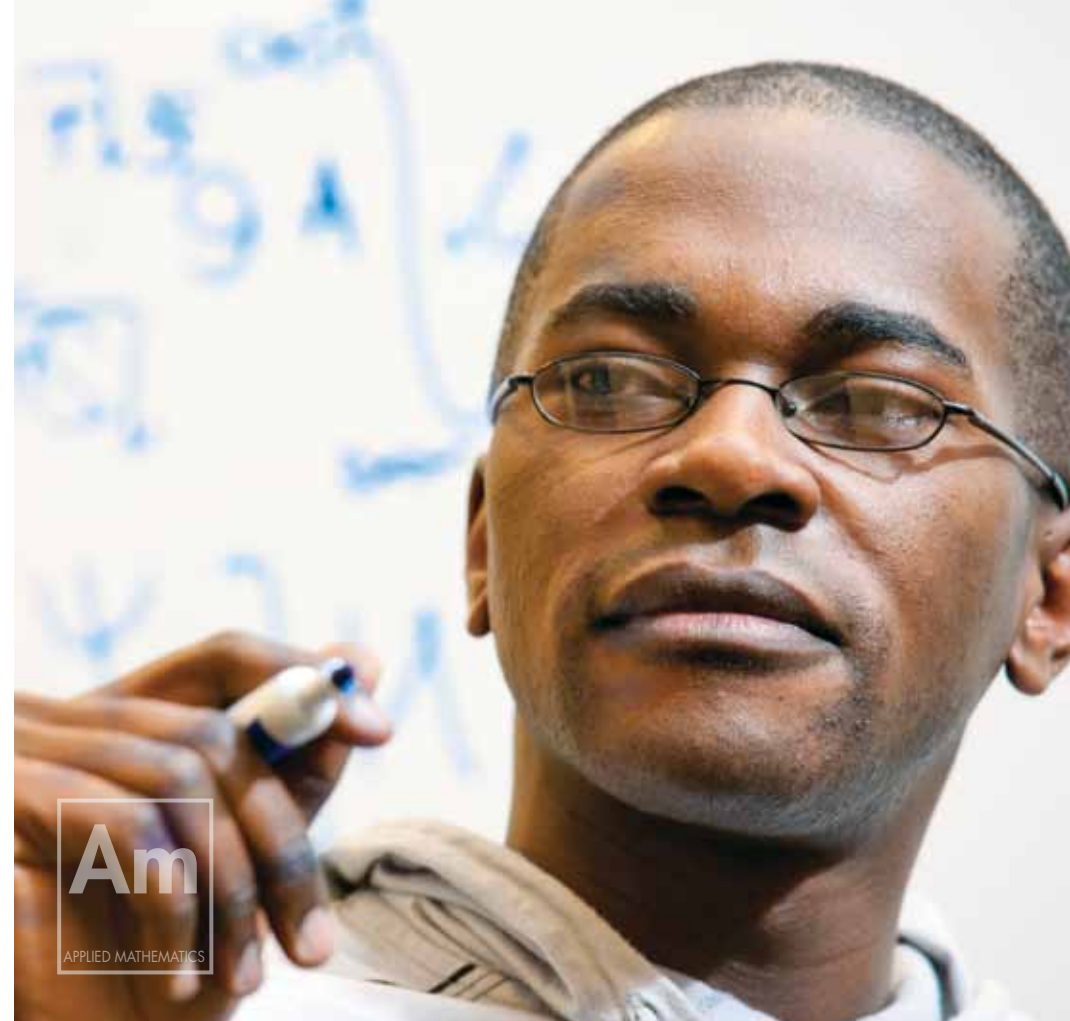
Samuel Karlin (MATH '44, M.S. '45) was a Stanford University professor emeritus of mathematics. Author or co-author of 10 books and more than 450 published papers, Karlin was a member of the American Academy of Arts and Sciences and the National Academy of Sciences. He was awarded the National Medal of Science in 1989.



William D. Francomb (MATH '70) is the founder and chairman of Solution Design Group, a privately held IT consulting and software development firm based in Minnetonka, MN. A member of MENSA, Francomb has built SDG into an award-winning company serving the healthcare, manufacturing, and retail industries with business analysis and software services. Francomb also is the owner of several businesses in the Twin Cities area and is active with Propellerhead Investment Group.



Kevin Yokley (AMAT '09) is chief technology officer at TnT Group, a financial derivatives trading firm in Chicago. He writes computer models that help traders to visualize the markets in real time and designs automated systems that can trade independently with limited human interaction. He credits his courses in numerical methods and his experiences with MATLAB and Mathematica with preparing him for his job in artificial intelligence. "Basically," he says, "my job is to quantify human instinct."



Applied Mathematics at IIT: Where Can It Take You?

IIT College of Science and Letters
ILLINOIS INSTITUTE OF TECHNOLOGY

Engineering 1 Building
Illinois Institute of Technology
10 W. 32nd Street
Chicago, IL 60616

To Learn More and How To Apply

<http://www.iit.edu/csl/pathways/>

Undergraduate Admissions:

http://www.iit.edu/undergrad_admission/

800.448.2329



ILLINOIS INSTITUTE OF TECHNOLOGY

What Is Applied Mathematics?

Mathematics is an elegant, precise, and rigorous way of solving problems involving things that can be measured. Applied mathematicians develop new mathematical tools and utilize them to address problems arising in all aspects of society. For example, our faculty members take part in efforts to detect national security threats in communication networks, to predict the weather more reliably, to manage financial risk, to understand cell and tumor growth, and to design safer nuclear reactors.



Why Is It Important?

The scientific and technological breakthroughs of the past century would not have been possible without people around the world using the universal language of mathematics. This phenomenon is only escalating as new mathematical tools are discovered and as mathematics that is used to solve one kind of problem is found to solve seemingly unrelated problems in other disciplines. A degree in applied mathematics will equip you to think quantitatively about a situation and arrive at a solution, wherever your career path may lead.



Where Can an Applied Mathematics Degree Take You?

Although many positions with the title “mathematician” or “statistician” require a graduate degree, there is a growing demand for people whose undergraduate training emphasizes modern applied mathematics. These positions are typically interdisciplinary and focus on a combination of modeling, analysis, statistics, and computation. They are found in such diverse fields as financial services, pharmaceutical research, and municipal administration. Applied mathematicians are found everywhere in commerce, industry, and government where quantitative data is used to make decisions. Our graduates have found positions in insurance companies, research laboratories, and Internet startups, among other places.

Just some of the places where our graduates have gone:

- **Graduate school** including Cornell University, New York University, University of Illinois at Urbana-Champaign, University of Chicago, and University of California, Los Angeles
- **Private industry firms** including Centro Software, the Gelber Group, and Avanade
- **Financial services and trading companies** such as Citibank, Kookmin Bank, Prime International Trading, HMC Investment Securities, and Peak6
- **Governmental and research institutions** like the U.S. Environmental Protection Agency, U.S. Department of Defense, and Argonne National Laboratory
- **Schools as educators** including Perspectives/IIT Math and Science Academy and other high schools throughout the country

Colloquia and Seminars

- Applied mathematics colloquia
- Stochastic and multiscale modeling and computation seminars
- Discrete applied math/networks and optimization seminars
- Meshfree methods seminars
- Collegiate mathematics education seminars
- Computations and applications seminars



Why Applied Math at IIT?

Ten reasons:

1. We are the mathematics department and we are applied. You will learn both the beauty of mathematics and how it can be used to solve real-life problems.
2. Classes are small, and you will receive personal attention from our 17 faculty members.
3. Even as an undergraduate, you can participate in cutting-edge research with our professors.
4. We cover all major areas of applied mathematics: analysis, computation, discrete, and stochastics. You will be exposed to the full spectrum while focusing on your particular interests.
5. You will choose a minor in another area, and it is easy to double major. You may even choose a five-course specialization to prepare you for a career in business, finance, industry, or education.
6. If you do well in your first two years, you may enroll in a combined bachelor of science/master of science program and leave IIT with two degrees.
7. You will join an interdisciplinary team of problem solvers in IIT’s signature Interprofessional Projects (IPRO) program (ipro.iit.edu).
8. You may learn about other cultures as you learn mathematics in a study-abroad program.
9. You will learn what is new in the world of applied mathematics through our weekly departmental colloquium, research seminar series, and the annual Menger Lecture.
10. You will get to know other like-minded students through our Math Club and Student Society for Industrial and Applied Mathematics chapter, which hosts guest speakers, organizes problem-solving competitions, and arranges social activities.

