BE IT ALL
ENGINEERING
AT ILLINOIS TECH

Create. Discover. Follow Your Passion.
WHY ENGINEERING AT ARMOUR?

DEPARTMENT OF BIOMEDICAL ENGINEERING
- Degree programs in cell and tissue engineering, medical imaging, and neural engineering

These are exciting times for biomedical engineering and for Illinois Tech’s Department of Biomedical Engineering. We have developed new research and teaching facilities, our faculty are on the forefront of research in the field, and we are continuing to grow our undergraduate program. We are attracting an exceptional group of undergraduates interested in the application of engineering and mathematics to biology and clinical medicine. In your sophomore year, you decide which of three BMI tracks you want to pursue (cell and tissue engineering, medical imaging, or neural engineering)—each of which integrates different aspects of traditional engineering fields with medical science.

DEPARTMENT OF CHEMICAL AND BIOLOGICAL ENGINEERING
- Degree program in chemical engineering

Illinois Tech’s Department of Chemical and Biological Engineering—established in 1901—was one of the first chemical engineering programs in the country. Today, it also continues to be one of the most innovative programs on the leading edge of relevance to society and industry. For example, to respond to emerging industry changes, the department has expanded its curriculum to introduce biology modules in course and laboratory instruction. Our students and faculty look at the world through a different lens—and are working on projects that will impact cities and communities across the globe.

DEPARTMENT OF CIVIL, ARCHITECTURAL, AND ENVIRONMENTAL ENGINEERING
- Degree programs in civil engineering, architectural engineering, and environmental engineering
- Certificate in engineering graphics and CAD curriculum
- Concentration in environmental engineering

Armour has a hundred-year-long tradition of educating civil engineers who are stewards of the systems that are the foundation of the human environment. These include building systems; transportation systems for roads, rail, waterways, and airways; water supply and treatment systems; and air protection systems. You will take many of the same courses as other engineers and combine them with classes such as Financial Accounting and Reporting, Operations Management, and Introduction to Marketing. You will become an engineer with an entrepreneurial outlook and management expertise—and an Illinois Tech graduate who is valued by employers around the world.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
- Degree programs in electrical engineering and computer engineering
- Dual-degree program in electrical and computer engineering

Join the ECE faculty, students, and alumni who are changing the world through their initiatives and research in such areas as alternative energy resources, communications, medical imaging, and computer hardware and software. Our tradition of innovation dates back to 1906, when Illinois Tech faculty member Lee de Forest invented the first vacuum tube capable of amplifying an electrical signal. Another exemplary technical leader was Martin Cooper (EE ’50, M.S. ’57), who invented the cell phone and continues to be a pioneer in the development of wireless communication. Today, our lab-intensive curriculum gives you the hands-on experience and skills you need to move these and emerging technologies forward.

DEPARTMENT OF MECHANICAL, MATериалS, AND AEROSPACЕ ENGINEERING
- Degree programs in mechanical engineering, materials science and engineering, and aerospace engineering

Our three bachelor’s degree programs expose you to an interdisciplinary context, which is ideal for industrial production and research enterprises. By weaving design and communications throughout our curriculum, we have created a culture of excellence that has resulted in several of our alumni becoming members of the National Academy of Engineering—one of the highest professional honors an engineer can receive. Our students often choose to deepen their interests in engineering through robotics, fluid dynamics, design, materials science, green energy, transportation, biomechanics, and space systems.

Armour College is committed to providing students dynamic, interdisciplinary learning environments. This is reflected in the newly renovated John T. Rettaliata Engineering Center, including the Robert B. Kyts Design Studio and Machine Shop.

There is no better time to be an engineer!

The current challenges faced by humanity have no geographical or cultural boundaries—and engineers hold the key to innovative, sustainable solutions.

At Armour College of Engineering we educate students to be leaders in the development and use of multidisciplinary approaches and technology to solve complex, socially critical problems. Our distinctive and relevant engineering education emphasizes the human skills essential to success. Leadership, entrepreneurship, and ethics are built into the curricula and various enrichment programs offered in Armour College.

Research at Armour is in an aggressive growth mode. Our faculty and students are conducting research in fields of significant impact. Our research enterprise ranges from fundamental, engineering science research to the development of new technologies with application to current industry and markets.

At Armour you will engage in research as an undergraduate student. Armour R&D is our signature undergraduate engineering research program. Designed to enrich your undergraduate education with valuable laboratory research, Armour R&D provides you with early tools for research, the excitement of discovery, and the opportunity to implement ideas.

An engineering education at Illinois Tech will empower you to succeed at a fulfilling career and to help others, do good, and contribute to society. You will be prepared to make a contribution on day one after graduation—and a lasting impact throughout your career.

I invite you to browse our new website to learn more about our engineering programs. I hope you are inspired by the accomplishments of our faculty and students, and the current and potential value of their work on our lives and the world.

Natacha DePaola
Carol and Ed Kaplan Armour College Dean of Engineering
At Armour College of Engineering, we integrate innovative thought, entrepreneurship, creativity, and design with engineering theory, research, and practice. You will get the chance to work on projects that are normally open only to graduate students—and have the opportunity to apply what you have learned in the classroom to some of the most complex problems facing society today.

We enhance our college’s already strong curriculum with lecture series, forums, interactive problem solving, professional site exploration, and team-intensive engineering projects focusing on four themes: **water, health, energy, and security**. As you take part in these theme opportunities, your activity is tracked in your own personal online portfolio for use as a supplement to your résumé or as additional material for your application to graduate school.

Having a complete understanding of the research and development process will also help ensure your success after you graduate. Our **Armour R&D Program** includes two programs: Program for Undergraduate Research Education (PURE), which focuses on research, and Mentored Innovation and Development (MIND), which focuses on developing research-based technology. Both programs aim to give undergraduate students a hands-on experience with research and development that is unique to Armour College.

All distinctive education programs are designed to give you a competitive edge and tangible experience in global issues. Be confident in the fact that when you graduate from Armour College of Engineering, you will already be working on relevant and impactful solutions.

**Consider a 2’fer**

Armour College also offers special degree programs that allow undergraduate students to earn both their bachelor’s and master’s degrees in as few as five years.