CHEMICAL ENGINEERING

Illinois Tech’s accredited Department of Chemical and Biological Engineering—established in 1901—is one of the first chemical engineering programs in the country. It 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 professors are engaging in breakthrough research that is addressing some of the most serious problems society will be facing in the coming years. Projects include managing and purifying water, developing alternates to fossil fuels, designing strategies for environmental cleanup, and engineering technologies for improved drug delivery. 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.

CHEMICAL ENGINEERING (CHE) SPECIALIZATIONS AT ILLINOIS TECH

Receive your bachelor’s degree while specializing in an area of greatest interest to you.

- Energy/Environment/Economics
- Environmental Engineering
- Polymer Science and Engineering
- Bioengineering
- Process Design and Operation

RESEARCH—EVEN AS AN UNDERGRAD!

Our chemical engineering faculty conduct cutting-edge research with real-world applications—and there are countless opportunities for undergraduates to participate.

A team of researchers led by Professor of Chemical Engineering Ali Cinar, director of Illinois Tech’s Engineering Center for Diabetes Research and Education, is working to ease the burden of insulin management in diabetes patients. The team is developing a fault-tolerant, next-generation artificial pancreas system that will automatically monitor and infuse insulin according to metabolic changes that occur in response to food intake and various types of exercise, from solo fitness efforts to organized sports.

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.

- B.S. Chemical Engineering/M.A.S. Biological Engineering
- B.S. Chemical Engineering/M.A.S. Biomedical Engineering
- B.S. Chemical Engineering/M.A.S. Chemical Engineering
- B.S. Chemical Engineering/M.A.S. Environmental Engineering
- B.S. Chemical Engineering/M.A.S. Food Process Engineering

OPPORTUNITY AWAITS

Engineering at Illinois Tech is ranked #24 in the country among public and private universities for the return on investment for our graduates. (PayScale 2018; calculated after aid)
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 CHE-oriented IPROs include:

- Auto engines as combined heat-power systems
- Large-scale solar desalination
- Creating a viable tissue implant for human joints
- Developing a new strategy to detect smuggled nuclear material

TAKE A VIRTUAL TOUR

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

Distinctive Education

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.