GRADUATE PROGRAMS

ARMOUR COLLEGE OF ENGINEERING

EDUCATING A NEW GENERATION OF ENGINEERS

ILLINOIS INSTITUTE OF TECHNOLOGY
A TRADITION OF EXCELLENCE

Armour College of Engineering has been preparing students to become engineers since 1890 - first as Armour Institute of Technology and today as part of Illinois Institute of Technology.

A lot has changed in the past 125 years, but some things remain the same. Armour College is committed to preparing students to lead in a rapidly changing, technology-driven, global society - and we are proud to say that our students continue to be among the most sought-after engineering professionals by companies across the U.S. and around the world.

Armour College graduates have several distinct advantages over other engineering students. They become part of an alumni community that includes Martin Cooper (EE ‘50, M.S. ’57), the “father” of the cell phone. They use emerging technologies in their courses and take classes in the newly renovated John T. Rettaliata Engineering Center.

Our graduate engineering education is aligned with global priorities. Our full-time faculty of nearly 100 scholars, researchers, and practitioners are engaged in fundamental and applied research that has global impact.

Now that is a real competitive edge.

Armour’s distinctive education is also reflected in its focus on the entrepreneurial and ethical aspects of the engineering profession. So when you graduate with an engineering degree from Illinois Tech, you will be well-prepared to innovate, manage change - and lead.
Research priorities include advanced materials; autonomous systems; bioengineering; food science/engineering; embedded systems; energy and sustainability; manufacturing; multimedia big data analytics; network and communications; smart grid; and urban systems (transportation sustainability, environmental). Armour College has externally sponsored research awards that exceed $55 million over the past four years.

- The Department of Biomedical Engineering is nationally recognized for research in medical imaging, cell and tissue engineering, and neural engineering, with five members of the American Institute of Medical and Biological Engineering (AIMBE) as faculty.
- The Department of Electrical and Computer Engineering counts Martin Cooper (EE ’50, M.S. ’57), the leader of the team that developed the first cell phone, among its distinguished alumni.
- Thirty-eight Armour alumni and three members of the faculty are members of the National Academy of Engineering.
- Our department of Chemical and Biological Engineering—established in 1901—was one of the first chemical engineering programs in the country.
DEGREE PROGRAMS

Armour College of Engineering is accredited by the Engineering Accreditation Commission of ABET. For more information on accreditation, visit www.abet.org.

### Master’s Degrees

- Architectural Engineering
- Biological Engineering
- Biomedical Engineering
- Biomedical Imaging and Signals
- Chemical Engineering
- Chemical Engineering with E3 Specialization
- Construction Engineering and Management
- Electrical and Computer Engineering
- Electricity Markets
- Engineering in Manufacturing
- Engineering in Materials Science and Engineering
- Engineering in Mechanical and Aerospace Engineering
- Environmental Engineering
- Geotechnical Engineering
- Network Engineering
- Power Engineering
- Public Works (Infrastructure Engineering and Management)
- Structural Engineering
- Telecommunications and Software Engineering
- Transportation Engineering
- VLSI and Microelectronics

### Master of Science Degrees

- Biomedical Engineering
- Chemical Engineering
- Chemical Engineering with E3 Specialization
- Civil Engineering
- Computer Engineering
- Computer Engineering and Electrical Engineering
- Electrical Engineering
- Environmental Engineering
- Manufacturing Engineering
- Materials Science and Engineering
- Mechanical and Aerospace Engineering

### Doctoral Degrees

- Biomedical Engineering
- Chemical and Biological Engineering
- Chemical Engineering with E3 Specialization
- Civil Engineering
- Computer Engineering
- Computer Engineering
- Electrical Engineering
- Environmental Engineering
- Materials Science and Engineering
- Mechanical and Aerospace Engineering

### Graduate Certificates

- Advanced Electronics
- Air Resources
- Applied Electromagnetics
- Architectural Engineering
- Biological Engineering
- Communication Systems
- Computer Engineering
- Computer Integrated Design and Manufacturing
- Construction Management
- Control Systems
- Current Energy Issues
- Earthquake and Wind Engineering Design
- Electricity Markets
- Fire Protection and Safety Engineering
- Geoenvironmental Engineering
- Hazardous Waste Engineering
- Indoor Air Quality
- Infrastructure Engineering and Management
- Particle Processing
- Polymer Science and Engineering
- Power Electronics
- Power Engineering
- Process Operations Management
- Product Quality and Reliability Assurance
- Signal Processing
- Transportation Systems Planning
- Waste and Wastewater Treatment
- Wireless Communications Engineering

For information on our co-terminal degrees, please visit engineering.iit.edu/programs/co-terminal-degrees.

The GRE test score requirement for those applying to a professional master’s program can be waived for those who qualify; you must have an undergraduate degree from a U.S. institution and a 3.0 GPA.
Department of Biomedical Engineering
- Neural engineering
- Medical imaging
- Cell and Tissue engineering

Department of Chemical and Biological Engineering
- Biological engineering
- Energy and sustainability
- Systems engineering
- Advanced materials

Department of Civil, Architectural, and Environmental Engineering
- Architectural engineering
- Construction engineering and management
- Engineering graphics
- Environmental engineering
- Geotechnical/geoenvironmental engineering
- Public works
- Structural engineering
- Transportation engineering

Department of Electrical and Computer Engineering
- Communication and signal processing
- Computers and microelectronics
- Power and control

Department of Mechanical, Materials, and Aerospace Engineering
- Design and manufacturing
- Dynamics and control
- Fluid dynamics
- Materials science and engineering
- Solids and structures
- Thermal sciences
Wanger Institute for Sustainable Energy Research (WISER)

WISER’s goal is to improve energy efficiency, enhance power reliability and security, minimize pollution, and continue the decarbonization of the global energy system in the most cost-efficient way possible. IIT researchers believe that the endpoint of this evolution will be electrification of most stationary energy uses with such high-tech renewables as photovoltaic, solar-thermal, and wind energy, and the use of hydrogen as the dominant transportation fuel in fuel-cell-powered electric vehicles. Housed within WISER, the Robert W. Galvin Center for Electricity Innovation pursues groundbreaking work in the generation, transmission, distribution, management, and consumption of electricity.

Pritzker Institute of Biomedical Science and Engineering

The Pritzker Institute enhances biomedical science and engineering research activities at IIT through partnerships with prestigious laboratories, including those with Argonne National Laboratory and the University of Chicago. The centers within Pritzker Institute include the Medical Imaging Research Center, the Center for Integrative Neuroscience and Neuroengineering Research, the Engineering Center for Diabetes Research and Education, the Center for Molecular Study of Condensed Soft Matter, and the Biophysics Collaborative Access Team.
For information on our co-terminal degrees, please visit:

- Fire Protection and Safety Engineering
- Electricity Markets
- Earthquake and Wind Engineering Design
- Current Energy Issues
- Control Systems
- Construction Management
- Computer Integrated Design and
- Computer Engineering
- Biological Engineering
- Architectural Engineering
- Applied Electromagnetics
- Air Resources
- Advanced Electronics
- Graduate Certificates
- Civil Engineering
- Chemical Engineering with
- Chemical and Biological Engineering

Doctoral Degrees
- Computer Engineering
- Civil Engineering
- Chemical Engineering with
- Chemical Engineering
- Biomedical Engineering
- Engineering in Materials Science
- Engineering in Manufacturing
- Electricity Markets
- Electrical and Computer Engineering
- Chemical Engineering
- Biomedical Imaging and Signals
- Biomedical Engineering
- Biological Engineering
- Architectural Engineering

Master’s Degrees
- Chemical Engineering with
- Chemical Engineering
- Biomedical Engineering
- Engineering in Mechanical
- Mechanical and Aerospace Engineering
- Materials Science and Engineering
- Electrical Engineering
- Computer Engineering
- Mechanical and Aerospace Engineering
- Electrical Engineering
- Computer Engineering and
- VLSI and Microelectronics
- Transportation Engineering
- Telecommunications and
- Structural Engineering
- Public Works (Infrastructure Engineering
- Geotechnical Engineering
- Geoenvironmental Engineering
- Environmental Engineering
- Engineering in Mechanical
- Biomedical Imaging and Signals
- Biomedical Engineering
- Biological Engineering
- Architectural Engineering
- Advanced materials
- Systems engineering
- Energy and sustainability
- Power and control
- Computers and microelectronics
- Communication and signal processing
- Design and manufacturing
- Computers and microelectronics
- Power and control
- Communication and signal processing
- Nanomaterials and nanocomposites
- Manufacturing processes
- Thermal sciences
- Fluid dynamics
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IIT’s Main Campus is home to the nation’s first Perfect Power smart microgrid — a laboratory for student and faculty research.
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