Mechanical engineers combine creativity and ingenuity to solve some of society’s toughest problems, as well as bring ideas to life. They design and build machines and the devices that power them, and are involved throughout the product development and manufacturing processes, from concept and design to installation and implementation.

The mechanical engineering field is diverse and exciting, offering employment in a variety of fields: aerospace and automotive industries, acoustics, biomedical research and engineering, energy production and management, heating and air conditioning, hydraulics, and manufacturing. Mechanical engineering is also a very versatile degree; graduates hold positions in such areas as design, analysis, research and development, technical sales, and engineering management.

Why Mechanical Engineering at Lawrence Tech?

Lawrence Technological University has been educating successful engineers for over 75 years, and provides students with the tools and knowledge they need to become the minds behind tomorrow’s great inventions. The Bachelor of Science in Mechanical Engineering program at Lawrence Tech is built around a core curriculum in manufacturing, mechanical systems, and thermal science. Students learn how products are designed, manufactured, and tested, as well as the basics of mechanisms and structures, and heat transfer, fluid mechanics, and energy conversion. Since many consumer products are electro-mechanical in nature, a sequence in electrical engineering is also included.

The curriculum emphasizes the development of strong analytic and problem-solving skills, while the Lawrence Tech focus on combining theory and practice means that the principles taught in the classroom are enhanced by many hands-on labs and real-world applications in courses taught by faculty with extensive industrial experience.

Like the field itself, the mechanical engineering program at Lawrence Tech offers a variety of opportunities. You can choose from five concentrations: alternative energy, automotive engineering, manufacturing engineering, mechanical system design, and thermal system design, and can further augment your preparation.

“The best thing about my Lawrence Tech education was the ability to take everything from the classroom and put it all together at work. Class sizes are just right and the hands-on faculty is outstanding.”

Doug Callahan, BSME’93, Engineering Manager, MPC
Bachelor of Science in Mechanical Engineering

by pursuing minors in aeronautical engineering or energy engineering.

One of your unique advantages in the Lawrence Tech program is a solid grounding in the liberal arts. Challenging courses in effective communications, history, philosophy, and the arts complement a technical foundation and equip you with the broad background you need to become a successful leader in any industry.

Co-op programs and industry-sponsored projects can provide you valuable contacts with leading companies and the opportunity to combine paid on-the-job experience with classroom studies. You can also participate in the Lear Entrepreneurial Program, which focuses on what it takes to run a company – how to create, promote, and market products and services. Another great opportunity is the Global Engineering program, which allows you to work and study abroad – an especially valuable experience in preparing to compete in the changing global economy.

Design Experience
The design experience is an essential part of Lawrence Tech’s mechanical engineering program and is integrated throughout the curriculum. Beginning with the freshman-level Introduction to Engineering course and culminating in the year-long capstone senior projects course, the program provides structured design opportunities combined with a strong emphasis on teamwork. In fact, team competitions and projects play an integral role in the overall learning experience. From concept to completion, students are afforded the opportunity to design, build, and compete with cutting-edge projects, such as a Formula-style car, Baja vehicle, radio-controlled airplane, and hydrogen fuel cell racer. Other projects have included everything from miniature roller coasters and high-performance go-karts to the improved design of wind tunnels and safety fences – challenging and innovative opportunities that reflect the many applications of mechanical engineering.

Graduates with a degree in Mechanical Engineering have many career options:
- Aerospace
- Alternative energy
- Biomedical
- Consulting firms
- Energy management
- Environmental engineering
- Government agencies
- Heating and air conditioning
- Transportation
- Manufacturing
- Power production
- Research and development

Getting Started
For more information, visit ltu.edu/engineering/mechanical or contact Lawrence Tech’s Office of Admissions at 800.CALL.LTU or admissions@ltu.edu.

Lawrence Technological University produces leaders with an entrepreneurial spirit and a global view. That’s why most Lawrence Tech students are employed within a month of graduating. Your benefits:

- Leadership Program that helps you develop the marketable skills that employers seek
- Leadership Portfolio that enhances your diploma – and your resume
- 12:1 student-faculty ratio
- Faculty with current industry experience
- Fully loaded high-powered laptop or tablet computer provided
- Schedules that work for you, with convenient day, evening, weekend, or online classes
- Hi-tech, wireless 102-acre campus that’s commuter friendly, with recreation, housing, and meal service options
- Financial-aid, co-op, and internship opportunities
- Proactive career placement services

Explore over 80 undergraduate, master’s, and doctoral programs in Colleges of Architecture and Design, Arts and Sciences, Engineering, and Management.