

Civil Engineering and Architecture

DUAL BACHELORS OF SCIENCE IN

Today the art and science of building is a multifaceted endeavor that blends design and technological sophistication with a concern for sustainability. The process of building any large structure is becoming increasingly complex, and the most successful projects rely heavily on a cross-disciplinary, team-oriented approach. The most valuable contributors in such an environment are individuals who have a broad understanding of aesthetics, design, engineering, and construction.



In recognition of the need for individuals with a wide-ranging set of professional skills, Lawrence Technological University offers a dual-degree program leading to both a Bachelor of Science in Civil Engineering and a Bachelor of Science in Architecture. Gradu-

ates with the dual degrees enjoy careers in both the civil engineering and architectural fields and are highly regarded by employers for their knowledge and practical training in both areas.

This unique and challenging program affords you the opportunity to gain a deeper understanding of the role each discipline plays in the real world and a correspondingly greater potential for productive work and stronger marketability in your professional career. You have ready access to professionals in both fields and exposure to the signature Lawrence Tech experience of theory and practice, which can include co-ops and internships.

The Bachelor of Science in Civil Engineering includes course work in construction, environmental, geotechnical, hydraulic, and structural engineering. Also addressed are professional issues such

Dynamic Duo

Two Lawrence Tech dual degree students demonstrated the convergence of engineering and architecture in a senior design project that won the Parsons Brinckerhoff Environmental and Water Resources Student Design Competition. Bethany Bezak and Jhana Frederiksen focused their project on the concept of “daylighting” – exposing a waterway that had been covered. Using their engineering and architecture skills, they designed a park-like rehabilitation scheme for the obscured Clinton River in downtown Pontiac, Michigan. The project goal was to rejuvenate the river, enhance the community, and celebrate water. As part of their award, the pair presented their design at the international World Water and Environmental Resources Congress in Anchorage, Alaska.

CURRICULUM

Your 174-credit-hour program consists of:

Basic Science, Communication, Math	36
Humanities (with emphasis on leadership)	17
Elective	3
Architecture	64–66*
Civil Engineering	52–54*
Total	174

*You have the choice between an introductory course in civil engineering or architecture

Completion time 5–6 years

“The dual degrees in civil engineering and architecture provide students with the ability to better understand the needs of clients, contractors, and industry practitioners. Communication and teamwork are key components in the business world, and the skills acquired within the dual program encourage the development of solid, lasting relationships needed for students to mature into distinguished professionals.”

Crystal Sapp, BSCE'07, BAr'07, MCEM'08

as ethics, leadership, and sustainable design. By selecting specific technical electives, you can further specialize in a particular civil engineering subdiscipline.

The Bachelor of Science in Architecture introduces the core skills of creative problem solving and provides a collaborative learning environment in which you explore the various disciplines involved in the creative design process, including urban planning, landscape architecture, building systems, interior architecture, lighting, and applied arts.

The program culminates in a two-semester capstone course in which you undertake challenging team research projects that combine both architecture and engineering.

Graduates holding the dual Bachelor of Science in Civil Engineering and Bachelor of

Science in Architecture degrees are eligible for professional licensure as civil engineers; they will also have completed the course work necessary to pursue a master's degree in architecture, the terminal degree required for licensure as an architect.

Why Lawrence Tech?

- Lawrence Tech has successfully educated leaders in the fields of design and construction for nearly 80 years.
- The University's role as a leading research center with state-of-the-art facilities enables you to become involved in applied research projects and gives you access to cutting-edge concepts and the latest technologies.
- The dual degree curriculum offers a broad understanding

of the technical, aesthetic, economic, and social aspects of design and construction, positioning you as a valuable contributor who will be attractive to a wide spectrum of employers.

- An emphasis on sustainability and environmental, health, safety, and welfare concerns exposes you to some of the most pressing issues facing today's engineers and architects.

- A focus on teamwork and communication provides excellent preparation for the realities of today's collaborative workplace.

Getting Started

For more information, visit ltu.edu/engineering/civil/civil_arch_dual.asp or contact Lawrence Tech's Office of Admissions at 800.CALL.LTU or admissions@ltu.edu.



GET MORE. DO MORE.

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 and earn higher salaries. The return on their bachelor's degree tuition investment ranks in the highest 30 percent of all U.S. universities. 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
- High-end personal computer customized with all needed software – a benefit, valued up to \$15,000, unique in Michigan and nationally
- Schedules that work for you, with convenient day, evening, weekend, or online classes
- High-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 100 undergraduate, master's, and doctoral programs in Colleges of Architecture and Design, Arts and Sciences, Engineering, and Management.