

Chemistry

BACHELOR OF SCIENCE IN

A degree in chemistry can provide a strong foundation for a wide variety of exciting careers. Chemists employed by manufacturing companies analyze products as part of the process of quality control. In the medical field they work with doctors, undertaking toxicological studies that assist in treatment. Many are heavily involved in the synthesis of new materials. Some chemists never even step foot in a laboratory; as practitioners of computational chemistry they use modeling software to analyze potential products prior to production. In drug companies especially, such chemists winnow a large number of possible molecules and synthetic pathways down to just a few and predict the properties of a new drug without its ever being manufactured in the laboratory.



Individuals with a solid chemistry background are highly valued in industry – and not just by chemical companies. Chemists who start “at the bench” often move into other areas, such as marketing, sales, and management. While chemistry is one of the preferred majors for admission to medical or dental school, it is also excellent preparation for those interested in studying law. Patent law, environmental law, and occupational health and safety law all require the background that only a technical degree like chemistry can provide.

Why Chemistry at Lawrence Tech?

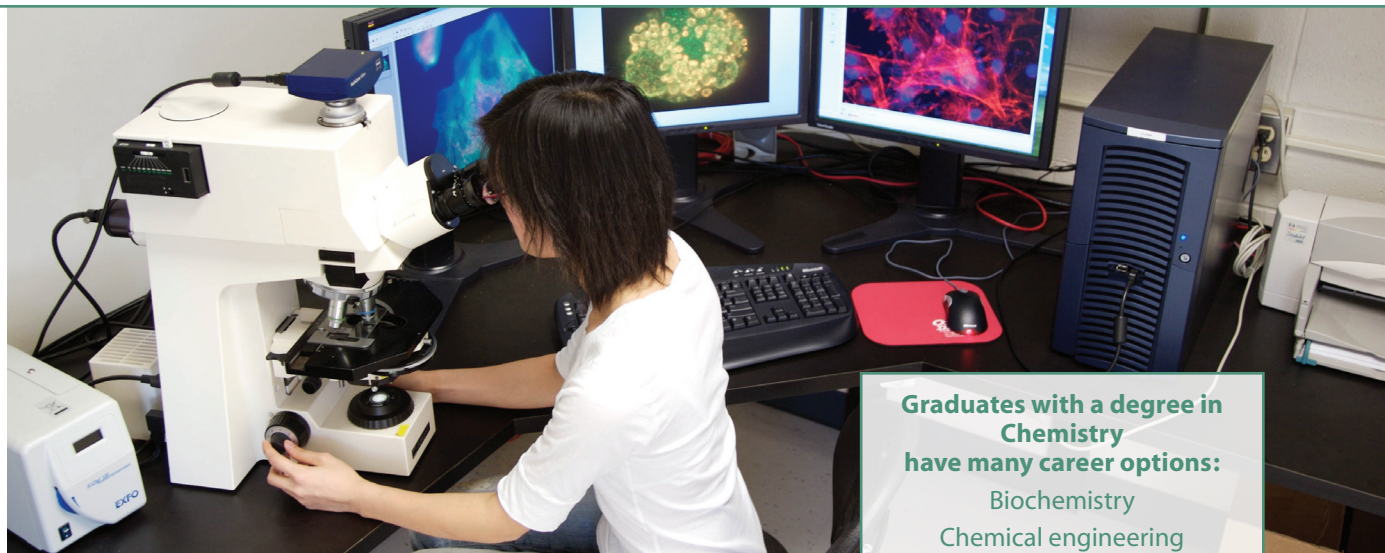
The hallmark of the Lawrence Technological University Bachelor of Science in Chemistry program is laboratory training that greatly exceeds the minimum standards of the American Chemical Society (ACS) and is far more extensive than that offered at many of the most prestigious institutions in the country. Introducing advanced instrumentation at the earliest opportunity in your education is another important facet of the program.

CURRICULUM

Your 125-credit-hour program consists of:

Humanities (with emphasis on leadership)	29
Math/Science	24
Chemistry	59
Electives	13
Total	125





Graduates with a degree in Chemistry have many career options:

Biochemistry
 Chemical engineering
 Chemistry laboratories
 Education
 Forensic chemistry
 Government
 Hazardous waste management
 Industry
 Medicine
 Research and development

Lawrence Tech offers you access to state-of-the-art instrumentation in fully computerized laboratories, providing real-world, hands-on experience. A partial list of major equipment includes:

- digitizing, computer-compatible oscilloscopes
- temperature-jump fast kinetics facilities
- computer-controlled automatic bomb calorimeter
- visible-ultraviolet spectrometers
- infrared spectrometers, including Fourier-Transform Infrared devices
- multiple gas chromatographs, some with automatic sampling and mass spectrometer detection
- high pressure liquid chromatography facilities
- nuclear magnetic resonance spectrometer
- atomic absorption spectrophotometer

As a chemistry student, you can select from three ACS-certified options: chemistry, chemical biology, and environmental chemistry. In addition, you may choose engineering chemistry as an

option. All offer excellent preparation for a variety of career opportunities or advanced study. The standard program, which requires 125 credit hours, and the 123-credit-hour environmental chemistry option both prepare you for work in laboratories, research, industry, government, medicine, and education. The engineering chemistry option, which requires 130 credit hours, allows you to pursue positions in traditional chemistry fields as well as many of those normally filled by chemical engineers. The 126-credit-hour chemical biology degree prepares you for careers in pharmaceutical or biotechnology industries, and satisfies the requirements for most medical, dental, or veterinary schools. Whatever your choice, you will receive personal attention and rigorous training that can make your education pay dividends for the rest of your life.

Getting Started

For more information, visit ltu.edu/arts_sciences/chemistry 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. 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.