



CHEMICAL ENGINEERING

Chemical engineering combines knowledge of chemistry and molecular interactions with the discipline of engineering to address problems at small and large scales. Chemical engineers invent new processes, improve existing ones, and design and operate plants and equipment to transform raw feedstocks into useful products across a wide range of industries, including agricultural and food-based products, consumer products, fine chemicals, fuels and petrochemicals, pharmaceuticals, plastics and electronic materials.

PURSUING CHEMICAL ENGINEERING AT UK

Chemical engineering students at UK experience an environment where faculty are readily accessible inside and outside the classroom. It is a place where students have the chance to grow personally and professionally through hands-on research projects, industrial cooperative education and service opportunities.

CAREER PROSPECTS IN CHEMICAL ENGINEERING

The breadth and analytical rigor of the chemical engineering bachelor's degree make it one of the most valued technical credentials. Starting salaries for chemical engineering graduates are typically among the highest of all majors. Chemical engineers are in demand and work in a wide range of industries.

UNDERGRADUATE RESEARCH IN CHEMICAL ENGINEERING

Chemical engineering faculty members at UK are committed to providing a broad range of research opportunities.

Undergraduate students work side-by-side with faculty members and graduate students on experimental and computational problems at the frontiers of chemical engineering knowledge. Areas of research emphasis include advanced materials, energy and sustainability, environmental engineering, membrane science and separations, pharmaceutical engineering and drug delivery, cancer research and polymeric materials.

CO-OPS

UK provides opportunities to co-op with many companies. Students can co-op during the fall, spring or summer terms. Those who complete three co-op rotations will receive formal recognition upon graduation with a special cord (beginning with May '23 graduates). Students work with the co-op director and their academic advisor to determine the best timing for their co-op experiences.

PROGRAM FACTS

Enrollment: 324

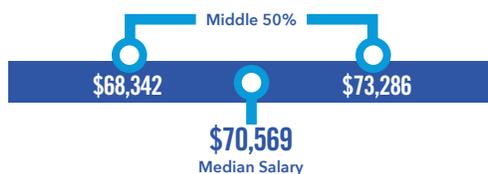
Common Minors: Business, Chemistry and Mathematics

Student Organizations:

AIChe, ISPE, Omega Chi Epsilon, Energy Club

GRADUATE STARTING SALARIES

Median full-time starting salary info for 2021 new college graduates
National Association of Colleges and Employers - Summer 2022



INDUSTRY SECTORS:

- Product Engineer
- Process Design Engineer
- Plant Manager
- Project Engineer
- Quality Control Engineering
- Research & Development
- Technical Support Services

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Curriculum Synopsis

This list is a synopsis of classes that a student will take to pursue a degree in chemical engineering. As part of the chemical engineering curriculum, students must complete the pre-engineering requirements, major requirements and general education coursework, called UK Core.

Note: This synopsis represents one of several paths to a chemical engineering degree. Consult the departmental website for details on specific paths.



YEAR ONE	YEAR TWO	YEAR THREE	YEAR FOUR
Engineering Exploration I and II	Computational Tools in Chemical Engineering	Chemical Engineering Lab I	Chemical Engineering Lab II
Fundamentals of Engineering Computing	Process Principles	Engineering Profession	Chemical Reactor Design
Chemistry I and Lab	Engineering Thermodynamics	Fluid Mechanics	Two Engineering Profession Courses
Physics I	Materials Science	Heat and Mass Transfer	Process Control
Calculus I and II	Chemistry II and Lab	Process Modeling in Chemical Engineering	Process Design I and II
Composition and Communication I and II	Physics II	Separation Processes	Professionalism, Ethics and Safety
UK Core Course	Calculus III and IV	Organic Chemistry I and II and Lab	Three Engineering/Science Electives
	Engineering Statistics	Physical Chemistry for Engineers	UK Core Courses
	UK Core Course	Engineering/Science Elective	
		Technical Writing	

TAKING CO-OPS?
When you participate in semester co-ops, the above schedule can adjust.

Detailed Curriculum Information: enr.uky.edu/explore/chemical-engineering

The University of Kentucky's chemical engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Revised August 2022. Information subject to change. For the most up-to-date information on the UK College of Engineering, visit www.enr.uky.edu.