The best part about the chemical engineering department is the sense of community the department fosters. Everyone in the department genuinely wants to help you succeed and will go out of their way to ensure you do so. The counseling from professors and the friendship from peers has been essential to my academic success and well as overall enjoyment of my time here at UT.”

—Chloe Frame, CBE senior

“Engineering is not easy. However, the faculty and staff in this department are here to help you along your academic journey, just as they have been there for me. I am forever grateful to the CBE community for their encouragement and support.”

—Ralph Laurel, CBE senior
Chemical and biomolecular engineers use their basic understanding of physical, chemical, and biological processes in combination with molecular information and discovery to develop new processes and products that are not only essential in everyday life, but also are critical to the advancement of human health and development and the improvement of environmental conditions. You will be trained to:

- understand the basic principles of science and engineering that provide the foundation for modern chemical and biological technology
- maintain awareness of environmental safety within the social and economic content of your profession
- become committed to ethical practice in your profession
- recognize that lifelong learning is essential for prolonged superior performance in your profession

What is Chemical & Biomolecular Engineering?

Diverse Study Body
With its diverse study body (32% female and 22% minority), the department provides the ideal setting to prepare you for a successful career in a global and technological society.

Facilities
The Eastman Unit Operations Laboratory offers state-of-the-art facilities for chemical engineering students to learn real-world practices. The Eastman Unit Operations Lab is designed to help chemical engineering students take theoretical knowledge from the classroom and put it to use under monitored conditions. Upper class students are exposed to the practices and experience that are so critical to success after college.

Research Opportunities
Partnerships with other disciplines at UT, such as medical, life and physical sciences, as well as nearby industries and Oak Ridge National Laboratory, help to create exceptional research opportunities for undergraduate students in CBE and develop leadership roles in the vital technologies of the future.

Concentrations and Minors
In recognition of the importance of biology, CBE offers a biomolecular engineering concentration.
- CBE students can easily acquire several different minors ranging from biology and business to environmental and material science engineering.

Student Organization
The American Institute of Chemical Engineers (AIChE) is the world’s leading organization for chemical engineering professionals. The UT Student Chapter of AIChE provides you with opportunities to develop leadership skills, gain technical knowledge, build your chemical engineering network by connecting with industry experts, applying for scholarships, and competing for awards.

Chem-E-Car
The department supports a Chem-E-Car team that competes at the annual ACIhE Student Southern Regional conference. Student members gain valuable research and design experience.

A World-Renowned Faculty
Our faculty is a highly accomplished and energetic group of leaders that includes two UT-ORNL Governor’s Chairs, distinguished professors, named professors, and recipients of numerous awards for their contributions to engineering education.

Why Chemical & Biomolecular Engineering?

Co-op and Internships
The most typical co-op assignments for CBE students involve working at chemical facilities, refineries, oil platforms, and process control of chemical production systems. There are a wide variety of opportunities in other industries, as well. Students most typically perform co-op or internship assignments at BAE Systems, Bayer, Cargill, Chemours, Eastman Chemical, ExxonMobil, Flint Group, Kimberly-Clark, Mars Petcare, PepsiCo/FritoLay, The Dow Chemical Company, Olin Corporation, SABIC Innovative Plastics, and Shaw Industries.

Career Readiness
We work hard to ensure all our students are well prepared for their next chapter upon graduation. In industry, ExxonMobil, BAE Systems, Eastman Chemical, Nissan North America, PepsiCo. / Frito-Lay Co., and Proctor & Gamble are just a few of the top-notch places that employ our grads. A number of CBE grads also pursue research placements at places like ORNL and the US Department of Defense.

Salary Outlook
Recent CBE grads with a bachelor’s degrees have landed jobs in agriculture, pharmacy, textiles, energy, and other sectors, with an average starting salary of $70,000.

Connect with our Students
The Tickle College of Engineering Ambassadors program recruits prospective students to the college, involves the student body in its goals and stimulates community interest in engineering. To schedule a campus tour with one of our ambassadors, visit tours.engr.utk.edu.