

The mission of our programs in chemical engineering is to prepare students to hold leadership positions in chemical engineering, continue their education through advanced study, and appreciate the impact of engineering in society. We aspire to excellence in graduate education and scholarship.

CEN Goals

Graduates of the department will have mastered the chemical engineering fundamentals necessary to serve as practicing engineers and will be prepared for further studies in engineering, science, or other professions. These fundamentals include an understanding of basic engineering concepts, the collection of information from experimentation and from the scientific and technical literature, and the prediction of system behavior through the development and application of mathematical models.

Graduates will be able to apply critical thinking, problem solving, and teamwork to the design of engineering processes and the solution of scientific and technical problems.

Graduates will be able to effectively communicate their work and ideas and they will understand the impact on and responsibilities to society of their actions.

Program Outcomes

Graduates from the program in chemical engineering must possess:

1. An ability to apply knowledge of mathematics, science, and engineering;
2. An ability to design and conduct experiments, as well as analyze and interpret data;
3. An ability to design a system, component, or process to meet desired needs;
4. An ability to function on multi-disciplinary teams;
5. An ability to identify, formulate, and solve engineering problems;
6. An understanding of professional and ethical responsibility;
7. An ability to communicate effectively;
8. The broad education necessary to understand the impact of engineering solutions in a global and societal context;
9. A recognition of the need for and an ability to engage in life-long learning;
10. A knowledge of contemporary issues;
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice; and
12. An appreciation of diversity issues in society