

University of Dayton Mission Statement:

A comprehensive Catholic university, a diverse community committed, in the Marianist tradition, to educating the whole person and to linking learning and scholarship with leadership and service.

The School of Engineering Mission Statement:

The Mission of the School of Engineering is to educate complete professionals who have an integrated knowledge of the theory and practice of engineering together with an equally strong understanding of the arts and sciences that will prepare them for fulfilling careers in leadership, service, and life-long learning for the good of society.

The Chemical Engineering Department Mission Statement:

The mission of the Chemical Engineering Department is to educate students who are highly sought after by employers internationally, excel in graduate and professional schools, engage in life-long learning, and make significant contributions to the profession and society. The department will promote and support integrated teaching/learning, scholarship, and the Marianist tradition of community, leadership, and service.

Chemical Engineering Program Educational Objectives:

1. Chemical Engineering graduates have successful careers in the chemical process industry with the skills necessary to have opportunities to work in non-traditional industries and positions.
 - Measure 1: Extent that engineering degree assisted in career.
 - Measure 2: Extent that engineering degree provided necessary skills to succeed.
 - Measure 3: Overall satisfaction with engineering education.
 - Measure 4: Oral and written communication skills.
2. Chemical Engineering graduates are successful at prestigious graduate, medical, and law schools.
 - Measure 1: Alumni attending graduate school survey.
3. Chemical Engineering graduates are committed to performing ethically while serving their professions, companies, and communities.
 - Measure 1: Serving the professions, companies, and communities survey.
 - Measure 2: Committed to performing ethically (advisory committee input, employer surveys, alumni surveys).
4. Chemical Engineering graduates exhibit strong critical thinking skills from the breadth of their general education and the depth of their foundation in engineering principles, and engage in continuous intellectual and personal growth.
 - Measure 1: Importance and preparation of engineering logic.
 - Measure 2: Importance and preparation of educational abilities.
 - Measure 3: Continuous intellectual and personal growth.

Chemical Engineering Program Outcomes:

- a. An ability to apply knowledge of mathematics, science, and engineering.
- b. An ability to design and conduct experiments, analyze and interpret data.
- c. An ability to design a systems, component, or process to meet needs within realistic constraints, such as environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- d. An ability to function on multi-disciplinary teams.
- e. An ability to identify, formulate, and solve engineering problems.
- f. An understanding of professional and ethical responsibility.
- g. An ability to communicate effectively.
- h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- i. A recognition for the need for, and an ability to engage in life-long learning.
- j. A knowledge of contemporary issues.
- k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice