Chemical Engineering

University of Utah

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Mission

The mission of the Department of Chemical Engineering is to graduate high quality chemical engineers, perform and disseminate groundbreaking research, and provide service to the profession and community at large.

Educational Objectives

Chemical Engineering and its constituencies have developed the following educational objectives. The objectives describe the career and professional accomplishments that the program is preparing graduates to achieve.

- 1. Graduates will contribute to their profession and succeed in their chosen careers.
- 2. Graduates will continue to learn and refine their critical thinking skills.
- 3. Graduates will be aware of issues that affect society and the world and will use that knowledge to strengthen their profession and contribute to the well-being of society.
- 4. Graduates will behave ethically and promote a culture of safety and inclusion.

Program Outcomes

The program outcomes are statements that describe what students are expected to know and be able to do by the time of graduation.

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- 2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- 3. an ability to communicate effectively with a range of audiences
- 4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- 5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- 6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- 7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Constituencies

The Department has identified the following groups and institutions as its main constituencies: students, industry, governmental agencies, academe at large, members of the Chemical Engineering faculty at the University of Utah, and alumni.