## **ABET Chemical Engineering**



## Accreditation

The New Jersey Institute of Technology (NJIT) Bachelor of Science in Chemical Engineering Program is accredited by the Engineering Accreditation Commission of ABET, <a href="www.abet.org">www.abet.org</a>, under the commission's General Criteria and Program Criteria for Chemical, Biochemical, Biomolecular and Similarly Named Engineering Programs.

## ChE Program Educational Objectives

The undergraduate program leads to a Bachelor of Science degree in Chemical Engineering (ChE), producing graduates who will, within 3-5 years:

- Engineering Practice: Graduates of our program are successfully engaged in the practice of chemical engineering within the industry, academe and government working in a wide array of technical specialties including but not limited to process and plant design operations.
- 2. **Professional Growth:** Graduates of our program advance their skills through professional growth and development activities such as graduate study in engineering or complementary disciplines, and continuing education; some graduates will transition into other professional fields such as business, law, and medicine through further education.
- 3. **Service:** Graduates of our program perform service to society and the engineering profession through participation in professional societies, government, civic organizations, and humanitarian endeavors.

## **ChE Student Outcomes**

Students from the ChE program will attain (by the time of graduation):

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- 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.