

## CHEMICAL ENGINEERING

### Enrollment and Graduation Data

Fall 2018 Enrollment – 258

2017-18 Graduates – 57 BS degrees conferred

### Program Educational Objectives

Graduates of the Bachelor of Science degree program in chemical engineering at RIT are expected, within a few years of graduation, to have:

- demonstrated an ability to draw upon the fundamental knowledge, skills, and tools of chemical engineering to develop scale-appropriate system-based engineering solutions that satisfy constraints imposed by a global society.
- demonstrated an ability to enhance their skills through formal education and training, independent inquiry, and professional development.
- demonstrated an ability to work independently as well as collaboratively with others, and to have demonstrated leadership, accountability, initiative, and ethical and social responsibility.
- demonstrated the ability to successfully pursue graduate degrees at the Master's and/or PhD level for those graduates who have the interest and the relevant qualifications.

### Student Outcomes

The student outcomes of the bachelor of science in chemical engineering are such that the graduates of the program will have the following skills and attributes:

- *Engineering Foundations* An ability to apply knowledge of mathematics, science, and engineering
- *Experimentation* An ability to design and conduct experiments, as well as to analyze and interpret data
- *Design* An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- *Multidisciplinary Teamwork* An ability to function on multidisciplinary teams
- *Problem Solving* An ability to identify, formulate, and solve engineering problems
- *Professional Responsibility* An understanding of professional and ethical responsibility
- *Communication* An ability to communicate effectively
- *Broad Education* The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- *Life-Long Learning* A recognition of the need for, and an ability to engage in life-long learning
- *Contemporary Issues* A knowledge of contemporary issues
- *Modern Tools* An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice