

Undergraduate Student Learning Outcomes

Department of Chemical Engineering

Fall 2003

The primary educational objective of the chemical engineering program at Kansas State University is to prepare students for diverse professional careers in chemical engineering or for advanced professional study. In the course of this process, the learning outcomes will be met.

Department of Chemical Engineering Bachelors of Science Degree Student Learning Outcomes

The chemical engineering program will provide graduates with:

- 1) an understanding of basic sciences, mathematics, and communications skills;
- 2) a rigorous foundation in the chemical engineering sciences;
- 3) an understanding of the methodologies of current design practice in chemical engineering;
- 4) an understanding of the design and implementation of experiments and the analysis and interpretation of data;
- 5) educational experiences in the humanities and social sciences that offer breadth, depth, and an opportunity to interact with faculty and students in these disciplines;
- 6) an understanding of the economic, ethical, and social factors in professional engineering practice; and,
- 7) numerous opportunities to develop professional skills in written and oral communication and team work.

Kansas State University Student Learning Outcomes

Knowledge, Communication

Knowledge, Critical Thinking

Knowledge, Critical Thinking,
Personal/Professional Development

Knowledge, Critical Thinking

Knowledge, Diversity, Ownership of
Learning

Diversity, Personal/Professional
Development

Communication,
Personal/Professional Development

Department of Chemical Engineering
Bachelors of Science Degree
Student Learning Outcomes

The chemical engineering program will instill in our graduates:

- 8) an awareness of the impact of technology on society and the ability to anticipate the social and humanistic implications of technology;
- 9) a motivation to make worthwhile contributions to the profession and to society in general;
- 10) an appreciation for multidisciplinary teamwork and the need for lifelong learning.

Kansas State University
Student Learning Outcomes

Knowledge, Critical Thinking,
Ownership of Learning

Ownership of Learning,
Personal/Professional Development

Diversity, Ownership of learning,
Personal/Professional Development