Industrial Engineering Student Learning Outcomes (per ITMAE and ABET accreditation standards).

Graduates of the Industrial Engineering baccalaureate program should be able to:

a) Apply the principles of engineering, science, and math to solve complex engineering problems;
b) Design and conduct experiments, as well as analyze and interpret data and draw appropriate conclusions;
c) Design, build, and test systems, components, or processes to meet specified needs;
d) Integrate the use of modern computer-based engineering tools into engineering practice;
e) Acquire and apply new knowledge using life-long learning strategies; and
f) Communicate effectively with diverse audiences and function on multi-disciplinary teams.

Additionally, graduates of the Industrial Engineering baccalaureate program should understand:

a) The need to assess the impact of engineering designs on society, including factors such as economics, ergonomics, the environment, and sustainability; and
b) The concept of the engineering profession through familiarity with professional societies, professional registration, the need for lifelong learning, and professional ethics.