

Industrial and Systems Engineering (ISE)

We live in a complex society, but in the Systems Science and Industrial Engineering Department, we are doing our best to make it less complicated. We study complex systems and look for simplifying solutions. We work across all environments and fields of study including manufacturing, management, service industries, healthcare systems, and others. So, our time could be spent at a hospital developing ways to decrease wait times in emergency rooms, or you might find us in a manufacturing facility working on quality assurance issues or consulting at amusement parks, and beyond.

We have structured our BS ISE program so students will accomplish the following within a few years of graduation:

1. designing, developing, and managing both deterministic and nondeterministic complex processes and systems involving people, information, equipment, and financial and material assets, with special emphasis on using probabilistic methods, design of experiments, and simulation.
2. joining and contributing to industrial, government, and service organizations, and to operate effectively with a high level of professional and ethical standards.
3. independent learning, acquiring professional certifications and/or advanced degrees in reputable graduate schools in manufacturing, service, and enterprise systems.
4. communicating and contributing effectively in a diverse team environment.

The faculty members are committed to providing the students with an outstanding academic experience. Our curriculum also provides excellent preparation for graduate studies. For qualified undergraduates, we offer several combined-degree (accelerated five-year) programs that can lead to both a BS degree in ISE and an MS degree in either Industrial and Systems Engineering (MS ISE), Systems Science (MS SS), or Master of Business Administration (MBA).

For more information, visit: <http://www.ssie.binghamton.edu>