Industrial Engineering

Industrial Engineering
Is the profession concerned with designing and improving business operations. They apply math, science, and technology to improve efficiency and quality in organizations, with special consideration for the human element. Graduates in industrial engineering are career-ready engineers prepared for:

- Immediate entry into their field, based on hands-on experience.
- Success as engineering professionals based on a solid grounding in the fundamentals.
- Long-term career success based on a well-rounded education.
- A life-long pursuit of learning.

Career Opportunities
The B.S. Industrial Engineering degree opens the door to many attractive career options in numerous industries (e.g., aerospace, automotive, biomedical, consulting, energy, entertainment, food & manufacturing). Sample positions accepted include management analyst, production engineer/manager, quality engineer, reliability engineer, sales, systems engineer, and project manager. Graduates are also well prepared for successful graduate study. Currently the IME Department offers masters degrees in Industrial Engineering (IE) and Integrated Technology Management (ITM), and (jointly with the College of Business) the Engineering Management Program (EMP). The focus of each of these programs can be tailored to best fit the individual needs of an industrial engineer.

B.S. IE Curriculum
The curriculum emphasis is based upon the application of basic knowledge of math, physical, and social sciences. The curriculum objectives are to improve the quality and productivity of creating and delivering goods and services and to act as the interface between technology and humans.

Computing Environment
Department and university laboratories and equipment, including computers and software, as well as industry projects, are integrated into coursework throughout the curriculum to investigate, test, and apply theoretical principles learned in the classroom.

Project Experience
Due to their unique experiences in their classes and laboratories, industrial engineers serve as valuable team members for projects across the college and university such as:

- Material Handling Design Comp.
- Engineers Without Borders
- PolyHouse Project Management
- RFID Inventory Management System
- Sustainability Projects
- Lead-Free Solder Joint Reliability
- LED Project
- Brick-Press Development for Zambia
- SAE Baja Competition
- Warehouse & Supply Chain
- Lean Operations Improvement
- Six Sigma Quality

Student Organizations
The department has active student chapters of the Institute of Industrial Engineers (IIE), Society of Manufacturing Engineers (SME), Society of Women Engineers (SWE), Association of Facility Engineers (AFE), Sales Engineering (SEC) and Engineers Without Borders (EWB). Student teams compete in national competitions and student organizations sponsor industry/student events.

The B.S. Industrial Engineering program is accredited by the Engineering Accreditation Commission of ABET, 415 N. Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700.