

Master of Science in Industrial Engineering (MSIE) at Lawrence Technological University, Southfield, Michigan, USA

Master of Science in Industrial Engineering (MSIE) ONLINE OPTION

As competition from around the globe increases, so does the demand for improved productivity, output, and service quality from domestic companies. As a result, the need for industrial engineers has never been greater. In fact, according the U.S. Department of Labor, industrial engineering employment is expected to grow 14 percent over the next decade.

Industrial engineers are charged with developing more efficient processes, reducing costs, and increasing productivity within the manufacturing industry - essential functions that employers depend on to remain successful. In order to improve efficiency, industrial engineers use their knowledge of mathematics to study product requirements and then design the manufacturing and information systems needed to meet those requirements. They also design production planning and control systems, improve systems for the distribution of goods and services, develop wage and salary administration systems and job evaluation programs, and create management control systems to help with cost analysis and financial planning. Due to the nature of their work, many industrial engineers have management positions.

Curriculum

Your 30 credit-hour degree program consists of:

CORE COURSES

- EME 5603: Engineering Systems Simulation
- EME 6403: Quality Control
- EME 6653: Advanced Optimization Techniques
- EME 6663: Applied Stochastic Processes
- EME 6713: Production Planning and Control
- EME 7613: Technology Management

ELECTIVES COURSES

- EME 6673: Six Sigma Processes
- EME 6753: Engineering Supply Chain Management
- EME 6763: Quality Engineering Systems
- EME 6883: Enterprise Productivity

Anyone can take it on-campus also. You can see MSIE program website for admission requirements and details: http://www.ltu.edu/engineering/industrial_engineering.asp