



Reasons to choose our program...

Western Michigan University offers graduate programs in industrial engineering that prepare graduates to apply scientific and mathematical principles to the design, improvement and installation of integrated systems of people, material, information and energy.

The **Master of Science in Industrial Engineering (M.S.E.)** is a 30-credit/10-course program designed to increase skills and abilities to analyze and interpret data to make optimal use of available information. The program offers the opportunity to conduct research through project and thesis options, and it allows the working engineer to complete the program in three years while maintaining full-time employment.

The **Doctor of Philosophy in Industrial Engineering (Ph.D.)** was developed to broaden the knowledge of students in the many areas of industrial engineering and on original research in a chosen area. Sample specialties include manufacturing systems, engineering valuation, human factors and ergonomics, operations research, production and research and quality management.

Also, available is the **Accelerated Graduate Degree Program in Industrial Engineering (M.S.E)** that allows WMU seniors and juniors to begin accumulating as much as 12 credits (four courses) toward the completion of a master's degree while completing their bachelor's degree. Students are charged the undergraduate tuition rate for these courses.

Teaching, Research and Program Focus Areas

The M.S.E. program allows specific career objectives of the individual to be met by focusing the electives and/or the thesis or project options.



The Ph.D. program emphasizes breadth of knowledge and requires students to conduct a significant, focused study through their dissertation research. Specific career path objectives of the individual may be met by focusing the electives and/or the optional thesis or project options.

Points of Pride

- The department is a Registered Education Provider for the Project Management Institute®. Credits count toward Project Management Professional Certification (PMP).
- WMU's state-of-the-industry Parkview campus is designed to promote the future success of students.
- The Ph.D. program is the only Ph.D. in industrial engineering in Michigan with a core area of engineering management.
- M.S.E. coursework can be completed in Kalamazoo and Grand Rapids.

Industrial Engineering

Industry Highlights

Opportunities for industrial engineers continue to grow with the rapid expansion of the service and information sectors of the economy. Graduates of the program have taken positions with higher levels of responsibility and remuneration. Areas of opportunity include:

- Advanced computer-integrated manufacturing
- Analysis and design of experiments
- Engineering management
- Ergonomics and human factors
- Facilities planning and design
- Financial and cost analysis
- Operations research
- Project management
- Reliability engineering
- Simulation modeling
- Total-quality management

The Ph.D. program combines a traditional research experience associated with a doctoral program with course work and laboratory experiences needed to prepare graduates to pursue careers in academia, research and industry.

Funding

Graduate and teaching associateships are available with a limited number available to first-year graduate students.

Admission

Domestic and International Applicants

Applications are accepted on an ongoing basis, allowing students to begin coursework in the fall, spring and summer semesters.

Department of Industrial and Entrepreneurial Engineering and Engineering Management

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Western Michigan University est. 1903

Offering over 100 world class advanced degree programs and holding Carnegie Foundation classification as a higher research doctoral university, the institution has consistently appeared in the U.S. News & World Report as one of America's best national universities. Graduate students make up 21 percent of the total student body and have been awarded nearly \$52 million in financial assistance. WMU enjoys a rich 60+ year history of graduate education.

Kalamazoo, Michigan

The community offers a vibrant cultural atmosphere mixed with a variety of outdoor recreational activities. The city of Kalamazoo is located midway between Detroit and Chicago and is in close proximity to the shoreline of Lake Michigan.

