Our 16-credit EDGE Engineering Entrepreneur Certificate Program is a great addition to an industrial and systems engineering degree. The EDGE program trains engineering students in the entrepreneurial skills required to commercialize new ideas, technologies and products. Students learn to solve problems and bring inventions to market through courses in entrepreneurial marketing, finance, law and management, as well as engineering. Additionally, engineering students have direct access to a wide range of business incubators, partner services, mentors and advocates both on and off campus.

engineering.wayne.edu/edge
OF WHAT INDUSTRIAL AND SYSTEMS ENGINEERING?

Industrial and systems engineers, like other engineers, are problem solvers. They design, streamline and improve complex processes and systems for maximum efficiency, whether the goal is to save time, save money, improve quality — or all three. Industrial and systems engineers are in high demand in nearly every sector of the economy, from manufacturing and service industries to energy.

DEGREE PROGRAMS

- Bachelor of science
- Master of science – concentrations in industrial engineering, manufacturing engineering, engineering management
- Professional engineering management master’s program (EMMP)
- Doctor of philosophy
- Doctor of philosophy – global executive track (GET)
- Graduate certificate programs – concentrations in engineering management and systems engineering
- Professional education for the technical manager

WHY THE WAYNE STATE COLLEGE OF ENGINEERING?

- Internships: Start working in the field before you even graduate with a large number of internship opportunities.
- Practical experience: Break classroom boundaries by building a concrete canoe, steel bridge, hybrid vehicle and more.
- Scholarships: The college awards up to 100 engineering scholarships annually. The university offers many more.
- Study abroad: Graduate with the global perspective employers love.
- Undergraduate research: Join expert faculty in research from your very first year.

UNDERGRADUATE RESEARCH

Wayne State is known for supporting undergraduate research as early as the freshman year, and the College of Engineering is no exception. In fact, the college recently kicked off its Undergraduate Research Award Matching Fund Program, providing students with support and faculty mentorship on a wide range of research projects.

The Department of Industrial and Systems Engineering is the home of research in all facets of product development, advanced manufacturing, quality engineering, supply chain management, logistics, health care systems engineering, ergonomics for design, risk and decision analysis, diffusion of innovation and much more.

ON THE JOB

Wayne State engineering students enjoy unparalleled career opportunities in Detroit and around the world. We support our students and alumni through our Career Services Office, online job listings, industry employer job banks and more. And, with so many employers based in the city and surrounding areas, our students have direct access to countless internship opportunities.

FACULTY EXPERTISE

Our faculty members are nationally recognized experts in a broad range of research areas. From emergency services, Six-Sigma and other quality principles to computer-integrated design and manufacturing, our faculty members are making a difference in our lives. Associate Professor Kyoung-Yun Kim, for example, recently introduced a Web-based decision support system for remotely selecting wheelchairs, improving the disabled population’s access to expert clinical recommendations.

Industrial and systems engineering alumna NANCY PHILIPPART has been recognized by Automotive News as one of 100 leading women in the North American auto industry. She is president of NLP Solutions LLC and served as executive director of GM Accessories for General Motors. She is also a student in Wayne State’s industrial and systems engineering global executive track doctoral program.

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