Our Mission

As the home of the first industrial engineering program in the world, the Harold and Inge Marcus Department of Industrial and Manufacturing Engineering at Penn State has made a name for itself in the engineering industry through its storied tradition of unparalleled excellence and innovation in research, education, and outreach.

 Degrees Awarded [2022-23]

- 50 M.S.
- 12 Ph.D.
- 134 Undergraduate

196 TOTAL DEGREES IN IME

$4.5 MILLION

2022 Research Expenditures

**Includes externally and internally funded projects, subcontracts, and capital improvements.

Enrollment

- Undergraduate: 92
- Master’s: 92
- Ph.D.: 84

Research Areas

- Human Factors/Ergonomics
- Manufacturing
- Operations Research
- Operations, Services, and Analytics

U.S. News Rankings

- Undergraduate: 9
- Graduate: 10

NSF CAREER Award Recipients

- 25 Faculty

Snapshot

HAROLD AND INGE MARCUS DEPARTMENT OF
INDUSTRIAL AND MANUFACTURING
ENGINEERING
Degrees Offered
- B.S. in Industrial Engineering
- M.S. in Industrial Engineering (Non-Thesis and Thesis Tracks)
- Dual M.S. in Industrial Engineering and Operations Research
- Ph.D. in Industrial Engineering
- Ph.D. in Industrial Engineering with a Minor in Operations Research
- Dual Ph.D. in Industrial Engineering and Operations Research
- M.Eng. in Industrial Engineering (Penn State World Campus)

Research Labs
- Additive Manufacturing and Reverse Engineering Lab
- Benjamin W. Niebel Work Design Lab
- Bridging Research in Innovation, Technology, and Engineering Lab
- Complex Systems Monitoring, Modeling, and Controls Lab
- Design Analysis Technology Advancement Lab
- Distributed Intelligent Systems and Controls: Research, Education, and Technology Lab
- Engineering Statistics and Machine Learning Lab
- Factory for Advanced Manufacturing Education
- Human Performance Assessment and Modeling Lab
- Human Subjects Testing Lab
- Laboratory for Intelligent Systems and Analytics
- Materials Processing and Characterization Lab
- Optimization Modeling and Application Lab
- Precision and Quality Measurements Lab
- Process Mechanics/Workholding Lab
- Service Engineering and Applied Optimization Lab
- Smart Lab

Research Centers and Initiatives
- Center for e-Design
- Center for Health Organization Transformation
- Center for Innovative Materials Processing through Direct Digital Deposition
- Consortium for Digital Enterprises
- Initiative for Sustainable Electric Power Systems

Hands-On Learning
Students enrolled in the industrial engineering program at Penn State have the unique opportunity to learn and perform research in the Factory for Advanced Manufacturing Education (FAME). FAME is a 10,000-square-foot integrated high bay laboratory with many elements found in a real manufacturing facility. It houses diverse manufacturing processes including casting, welding, machining, forming, injection molding, and assembly systems. In addition, the lab includes automated high-tech facilities for robotics and assembly, featuring computer-integrated manufacturing cells and robots.

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