INDUSTRIAL AND MANUFACTURING ENGINEERING

Industrial and manufacturing engineers are concerned with the design, improvement, installation, and operation of integrated systems of people, material, information, and energy for the development of environmentally sound and globally competitive enterprises.

Industrial/manufacturing engineers are needed in industries ranging from medical products and equipment manufacturing to automotive and electronic components manufacturing. Their skills benefit organizations such as hospitals, banks, airlines, telecommunications companies, and more. Some activities of an industrial/manufacturing engineer include: methods improvement; plant layout; integration of automation components (CAD and CAM); logistics; supply chain management; economic analysis; optimization of resources; quality control; reliability analysis; and ergonomics, i.e., design of workplaces, equipment, and tools for maximum productivity and employee comfort and safety.

In manufacturing companies, industrial/manufacturing engineers may be responsible for production and inventory control, quality control, plant layout, and work station design, and may lead the effort for the introduction of new technologies and other advancements. In service organizations these engineers may develop methods for optimal utilization of resources, such as doctors, nurses, and medical equipment in a hospital; determine the optimal number of communication lines and service level for a telephone company; participate in the development of a total quality management system for a bank, etc.

Mission Statement

The mission of the department is to provide a broad-based education in industrial and manufacturing engineering and to prepare students for a diversified career in industry, academia, government, and private sectors.

Programs

- Connected Systems Engineering, MS (https://catalog.uwm.edu/engineering-applied-science/industrial-manufacturing-engineering/connected-systems-engineering-ms/)
- Engineering, BS (https://catalog.uwm.edu/engineering-applied-science/industrial-manufacturing-engineering/engineering-bs/)
- Industrial Engineering, BSE (https://catalog.uwm.edu/engineering-applied-science/industrial-manufacturing-engineering/industrial-engineering-bse/)
- Industrial Engineering, Minor (https://catalog.uwm.edu/engineering-applied-science/industrial-manufacturing-engineering/industrial-engineering-minor/)

Faculty

Name	Rank	Degree	School	Graduate Faculty	Emeritus Faculty
Madiha Ahmed	Lecturer	MS	University of Wisconsin-Milwaukee		
Tsong-How Chang	Associate Professor	PhD			✔
Jaejin Jang	Associate Professor	PhD	Purdue University	✔	
Edward W. Knoblock	Associate Professor	MS			✔
Wilkistar Otieno	Associate Professor	PhD	University of South Florida	✔	
Timothy Patrick	Associate Professor	PhD	University of Missouri-Columbia		✔
Matthew Petering	Associate Professor	PhD	University of Michigan	✔	
Brett Peters	Professor	PhD	Georgia Institute of Technology, Dean of CEAS	✔	
Umesh K. Saxena	Professor	PhD, PE			✔
Hamid K. Seifodini	Associate Professor	PhD	Oklahoma State University	✔	