A master’s degree was once seen as the ultimate professional credential for engineering in manufacturing systems, yet today an increasing number of industry leaders recognize the depth and breadth of competence afforded through preparation at the doctoral level. Earning a doctoral degree can enhance your advancement potential in an increasingly competitive field.

Why Lawrence Tech?
Lawrence Tech’s program offers you in-depth knowledge about materials, processes, systems, engineering system simulation, quality, productivity, economics, and technology management.

The core courses are designed to help you sharpen your specialized skills and competencies. In Design of Experiments you will study how to create the minimum number of experiments to obtain the maximum possible data. For the Manufacturing Systems Simulation course you will focus on building mathematical models for manufacturing systems, while learning to foresee potential issues and their solutions, in order to optimize performance. Creating the best design systems to maximize reliability and manufacturing goals is the focal point of the Design for Reliability and Design for Manufacturability courses. The Process Control class covers modeling and designing processes for optimization, quality, and profit. And in Strategic Planning you will strengthen the skills necessary to formulate successful strategic plans.

Lawrence Tech’s Doctor of Engineering in Manufacturing Systems is unique in three aspects:

- The students are practicing engineers working full-time in the Detroit metropolitan area – one of the world’s leading and most technologically advanced manufacturing regions.
- A required internship, similar to the medical profession, will engage you in the process of solving real-world manufacturing systems problems.
- You will work closely with two advisors – an academic advisor, who imparts state-of-the-art knowledge about engineering principles, and an industrial advisor, who provides significant industrial experience and support.

“The DEMS program gave me the tools needed to drive efficiency in the total value chain, from product engineering at the concept stage to manufacturing process design on the shop floor.”

Dr. Ali Jammoul, Director, Global Chassis Engineering, Ford Motor Company

CURRICULUM
The Doctor of Engineering in Manufacturing Systems program consists of four segments designed to provide you with the knowledge necessary to achieve your goals.

Your 90-credit-hour program, earned after a bachelor of engineering degree, consists of:

- Manufacturing Systems Core 24
- Doctor of Engineering in Manufacturing Systems Core 18
- Electives 12
- Doctoral Dissertation 36
- Total Credit Hours 90
Lawrence Tech’s Doctor of Engineering in Manufacturing Systems dissertation challenges you to utilize your high-level scholarship, engineering expertise, and ingenuity to find a solution to a real-world manufacturing systems issue at your assigned facility. Your advisors will work alongside you to ensure that a challenging blend of advanced technology and creativity forms the foundation of your research. Your solution should be a new manufacturing-related device, process, system, or software that represents an innovation in manufacturing systems engineering.

Getting Started
For more information, contact Lawrence Tech’s Office of Admissions at 800.225.5588 or admissions@ltu.edu. For specific questions about the DEMS program, call Dr. K. Taraman, Director, at 248.204.2565

“The DEMS program at LTU was a very invigorating experience and a great model of advanced engineering education. The intellectual atmosphere was truly an amplifier for imagination, curiosity, and productive inquiry.”
Dr. Adel Khanfar
Director, Product Development, U.S. Manufacturing Corporation

Lawrence Technological University produces leaders with an entrepreneurial spirit and a global view. That’s why Lawrence Tech grads earn a return on their tuition investment that ranks among the highest 30 percent of all U.S. universities. Your benefits:

• Intensive leadership-driven programs that embrace theory and practice
• Faculty with current industry experience
• Convenient schedules that include day, evening, weekend, and online classes
• Well-connected career placement services
• A high-tech, wireless 102-acre campus that’s commuter friendly, with recreation, housing, and meal service options

Explore over 100 undergraduate, master’s, and doctoral programs in Colleges of Architecture and Design, Arts and Sciences, Engineering, and Management.