According to Major General Scott West, former commander of the U.S. Army’s TACOM Life Cycle Management Command in Warren, the Army expects to boost employment in the Detroit metropolitan area from 6,500 today to 9,800 by 2015 – and most of those jobs will be filled by civilians with advanced degrees (Detroit Free Press, Aug. 21, 2009).

To meet this demand, Lawrence Technological University developed the Graduate Certificate in Manufacturing Systems for the Defense Industry in cooperation with General Dynamics, Raytheon, TARDEC, TACOM, DRS Technologies, and Automation Alley.

A part of Lawrence Tech’s “Recovery Starts Here” program in support of workers affected by upheavals in the automotive industry and Michigan’s economy, the Graduate Certificate in Manufacturing Systems for the Defense Industry was designed for displaced engineers who wish to retool to work within the growing defense sector of Michigan’s economy.

The Graduate Certificate in Manufacturing Systems for the Defense Industry focuses on the specific skills engineers need to succeed in the defense industry. Subject matter will include the Defense Acquisition System, the development of contracts for the Department of Defense from a defense contractor’s perspective; federal procurement, acquisition, and contract laws and regulations; ethics; manufacturing regulations and logistics; defense engineering systems modeling and simulation; productivity measurement; criteria for manufacturing systems selection; global manufacturing; strategic planning; and defense project management principles and practices.

The 15-credit-hour Graduate Certificate in Manufacturing Systems for the Defense Industry consists of five three-credit engineering/manufacturing courses that concentrate on military and defense acumen. Defense industry experts serve as guest instructors throughout the program.

The certificate’s credits are transferable to the Master of Engineering in Manufacturing Systems, which can be earned with an additional 15 credits.

“The defense certificate certainly opened doors for me. The knowledge I acquired in acquisition, simulation, and contracting was key to obtaining my current position.”

Tony Castillo, Graduate Certificate in Manufacturing Systems for the Defense Industry, 2010
Project Leader DMSMS, Automation Alley Defense Office
Why Lawrence Tech?
Lawrence Tech’s alumni, faculty, and students have long played a significant role in advancing the nation’s leadership in manufacturing, technology, and innovation. Proximity to industry, both literally and figuratively, has been a hallmark of a Lawrence Tech education since the University’s beginning in 1932. Not only was the University situated next door to where Henry Ford perfected his first moving assembly line, but it was also founded on the principle of “Theory and Practice.” All programs are developed with the input of industry and business leaders so that students learn the theories of their disciplines and how to put those theories to work in the real world.

Admission
Applicants to the Graduate Certificate in Manufacturing Systems for the Defense Industry program must:

- Be a U.S. citizen
- Hold a Bachelor of Science degree in mechanical, electrical, computer, or industrial engineering, or a related program, with a minimum GPA of 3.0, from an accredited university.
- Provide official transcripts of all college work completed.
- Provide a resume that includes work experience.
- Provide two letters of recommendation from current or former supervisors.
- Submit a completed graduate application form.

Getting Started
For more information, contact Lawrence Tech’s Office of Admissions at 800.CALL.LTU or admissions@ltu.edu. For specific questions about the Graduate Certificate in Manufacturing Systems for the Defense Industry, call 248.204.2582 or email mfgsyst@ltu.edu.

GET MORE. DO MORE.
Lawrence Technological University produces leaders with an entrepreneurial spirit and a global view. That’s why most Lawrence Tech students are employed within a month of graduating and the earning power of a Lawrence Tech bachelor’s degree ranks in the top third 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.