Lawrence Technological University is situated at the center of some of the most advanced manufacturing and research activity in the world. Oakland County alone is home to 40 percent of the U.S. robotics industry, and 200 Fortune 500 companies have operations here. Most of Michigan’s leading manufacturing companies are situated within a few miles of the Lawrence Tech campus.

Lawrence Tech, its alumni, faculty, and students have long played a significant role in advancing the region’s leadership in automated manufacturing. The Master of Engineering in Manufacturing Systems (M.E.M.S.) degree program is a prominent example of Lawrence Tech’s commitment to the growth and success of area industries, and to increasing the achievement and performance of the region’s most valuable resource — its people.

**Corporate neighbors in Lawrence Tech’s technology cluster include firms specializing in:**
- computer software/hardware and information
- telecommunications
- consumer products
- industrial processes
- automotive suppliers
- automotive R & D
- design and engineering
- health care
- diversified (non-automotive) manufacturers
About the Manufacturing Systems Program

Lawrence Tech’s Master of Engineering in Manufacturing Systems is designed for working professionals who are graduates of an ABET-accredited undergraduate engineering program, and who have at least one year of experience in industry. For the convenience of employed students, all coursework is in the evening. Each course meets once per week, from 5:45 p.m. to 8:15 p.m. This schedule permits you to complete all degree requirements in as few as two years, taking two courses per semester. Semesters begin in August, January, and May, and you may start the program at the beginning of any semester. Consult the current University Catalog or Admissions Office for exact dates and application deadlines.

Lawrence Tech’s M.E.M.S. program emphasizes the vital interplay among manufacturers, engineers, researchers, suppliers, marketers, salespeople, and managers.

The program is designed to help students understand the systematic relationships that pervade the entire modern manufacturing process. It stresses the important interaction between manufacturers and suppliers that is key to improving industrial output. In short, the program seeks to strengthen the ability of practicing engineers to design, develop, and effectively utilize manufacturing systems to produce a quality product at the least cost.

The rare combination of Lawrence Tech’s practical orientation, academic experience, resources in the manufacturing field, and convenient accessibility is unrivaled in the state of Michigan. The M.E.M.S. program is in line with my professional goals; therefore, I could not have chosen a better university to complete my master’s program.”

Mark Shkoukani, senior manufacturing engineer, Ford Motor Company
RESOURCES FOR LEARNING

M.E.M.S. is a cross-disciplinary graduate program administered by Lawrence Tech’s College of Engineering. It draws upon the best resources of the entire University. Lawrence Tech faculty have both the academic credentials and professional experience to provide practical insights to textbook theory. Lawrence Tech’s graduate engineering faculty all have doctoral degrees. Each is involved in applied research and consulting. The faculty is augmented with qualified experts from industry who help expose you to the latest advancements and techniques practiced in industry. Lawrence Tech’s educational philosophy, which blends traditional educational models with current practice, problems, and solutions, is highlighted in the University motto: theory and practice.

Several million dollars have been invested in building and equipping new manufacturing laboratories, funded by industry and supplemented with SME Education Foundation support. Computer-Aided Engineering (CAE), process simulation and analysis laboratories, Apollo workstations, and a network of personal computers provide significant learning resources.

Yet another important facet of the M.E.M.S. program is the student body itself. You will participate with, learn from, and get to know other top students who represent a variety of industries, manufacturers, and suppliers. The chance to develop both professional and personal relationships with other graduate students has obvious benefits.

“\nThe M.E.M.S. program has been a strong motivator for me. It’s great to be in an environment where you are consistently being reminded that your potential is endless.\n
Janet Holzinger
engineer, Ford Motor Company
PROGRAM REQUIREMENTS

The degree requires 35 credit hours of coursework (based on a semester system). Students are required to include the following eight core courses (24 credits).

- Engineering Materials (EME 6103)
- Manufacturing Processes (EME 6203)
- Computer Integrated Manufacturing (EME 6303)
- Quality Control (EME 6403)
- Manufacturing Productivity (EME 6503)
- Engineering Economics (EME 6603)
- Manufacturing Systems (EME 6703)
- Engineering Management (EME 6803)

Students are also required to take three elective courses (nine credits), and register in the Professional Seminar twice (one credit each). The credit requirements are summarized as follows:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core (eight courses)</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>Professional Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
</tr>
</tbody>
</table>

The University Catalog contains complete curricular information.

GETTING STARTED: ADMISSIONS

An applicant may be admitted to the M.E.M.S. program as either a regular or a conditional graduate student, depending upon background and qualifications. Admission to the program as a regular graduate student requires:

- Bachelor of Science in an engineering program accredited by ABET;
- Minimum undergraduate grade point average of 3.00 (B average);
- Minimum of one year of professional experience after graduation;
- Demonstration of high potential for success based on:
  — Graduate admissions application;
  — Three letters of recommendation: At least one letter from employer documenting professional experience and one letter from a professor if the applicant has graduated within the last three years;
  — Official transcripts of all college work completed;
  — A resume including experience and extracurricular activities.

Applicants who do not meet all of the conditions for regular graduate admission may be considered for conditional admission by the Graduate Admissions Committee, provided they demonstrate an exceptionally high aptitude and promise for doing graduate work and hold a Bachelor of Science degree in engineering. A conditional graduate student will be granted regular status after maintaining a minimum 3.00 GPA in three consecutive graduate level courses. Graduate students must maintain a minimum GPA of 3.00 in all coursework to remain in good standing.

APPLY NOW

Your completed application materials (along with the nonrefundable application fee listed on the form) should be sent directly to Lawrence Tech’s Office of Admissions. Visit the University’s Web site for an application form.

Phone: 800.CALL.LTU (225.5588) or 248.204.3160
Fax: 248.204.3188
E-mail: Admissions@ltu.edu
Mail: Lawrence Technological University
      Office of Admissions
      21000 West Ten Mile Road
      Southfield, MI 48075-1058
Web site: www.ltu.edu

"M.E.M.S. has made a dramatic, positive impact on my professional skills. Because M.E.M.S. faculty work in the manufacturing domain, they respect the importance of enforcing graduate students to dwell on the link between theory and practice. In other words, knowledge does, indeed, translate to power in today’s globally aggressive marketplace. All we have to do is harness it. M.E.M.S. does just that.”

Garett S. Patria,
body shop maintenance supervisor, DaimlerChrysler
ABOUT THE LAWRENCE TECH COLLEGE OF ENGINEERING

Lawrence Tech’s College of Engineering, with some 2,300 undergraduate and graduate students, provides nearly 40 percent of the baccalaureate engineers each year in the Detroit metropolitan area. Academic programs are designed to meet the needs of students who hold jobs while attending college. The College’s population of part-time working students places it among the largest evening undergraduate engineering programs in the nation. The College comprises four departments — civil, electrical and computer, and mechanical engineering; and engineering technology.

Founded in 1932, Lawrence Tech, with some 5,000 students, is among Michigan’s largest independent universities. Over 40 majors or course concentrations are offered at the baccalaureate, associate, and graduate level.

NOTICE OF NON-DISCRIMINATORY POLICY

Lawrence Technological University adheres and conforms to all federal, state, and local civil rights regulations, statutes and ordinances. No person, student, faculty, or staff member will knowingly be discriminated against relative to the above statutes.

Lawrence Technological University is an equal opportunity employer.