Manufacturing Technology

Required Courses

Why Choose Manufacturing Technology?

The Manufacturing Technology program is the only manufacturing technology program in Michigan and one of a few in the country that offers two individual career pathway concentrations. Prospective students have a choice of Manufacturing Processing Technology, or Manufacturing Tooling Technology.

You will develop a solid technical foundation through the application of processing technology and tooling operations. You will learn to apply relevant calculations, work in a parametric environment, utilize precision metrology equipment, plan machining processes, specify tooling, equipment requirements, interpret CAD data, and utilize manual and CNC machining equipment. Two CNC courses take you through 2-D manual G-code programming, 2-D and 3-D programming, and 3-D CAD/CAM programming.

All courses feature project-based learning in well-equipped facilities. Lab time alone accumulates to nearly 1,000 hours of applied experience. Course projects focus on manufacturing processing, problem solving and take you through the costing, designing, building, setup, tryout and troubleshooting of manufacturing processes and tooling operations.

This program provides an excellent foundation for any manufacturing-related career. Graduates often use it as a stepping stone to a related bachelor’s degree program.

Career Opportunities

Because nearly every manufacturing industry requires skilled professionals with a solid foundation in manufacturing processing and tooling operations, graduates of the Manufacturing Technology program are in high demand and have an array of options to choose from upon graduation.

The Manufacturing Technology degree is designed to prepare students to enter industry directly. Many of the career opportunities include: tooling operations, machining operations, manufacturing and engineering operations, computer programming operations, CNC operations, and general manufacturing applications. The program provides students with laboratory projects, career based education, and specific industrial skill sets.

With additional experience and/or education, graduates can move into occupations such as Process Engineer, Tooling Engineer, Manufacturing Engineer, Project Engineer, and Technical Instructor, as well as, all levels of management. Graduates, who decide to continue their
education can stay at Ferris and, within two additional years, earn a bachelor's degree in one of many related programs.

**Admission Requirements**

Admission to the College of Technology is open to high school graduates who demonstrate academic preparedness, maturity and seriousness of purpose with backgrounds appropriate to their chosen program of study. Among first-time students in our technical programs, the average high school GPA is 2.8, and the average ACT composite score is 20.

Students entering the Manufacturing Technology program must be high school graduates with a 2.75 cumulative GPA along with an 18 ACT composite and a math sub-score of 19 or 950 SAT16 Total and a SAT16 math sub-score of 500 (MATH 115 placement).

Students close to the requirements are encouraged to apply and will be reviewed on an individual basis.

Students may qualify for college credit while still in high school. Contact your counselor or the Manufacturing Technology program coordinator (231-591-2511) for details, or visit our homepage.

Transfer student must have a 2.0 cumulative gpa and placement into MATH 115 and ENGL 150.

**General Education Requirements**

All University General Education requirements for an Associate’s degree is [here](#).

Please consult this link for a complete listing of General Education Electives.

Consult the Required Course above or program advisor for program specific General Education requirements.

**Graduation Requirements**

The Manufacturing Technology program at Ferris leads to an associate in applied science degree.

Students must

- maintain a 2.00 cumulative FSU GPA
- have 15 credits of Ferris classes (FSU Residency requirement)
- have a minimum 60 total credits to earn an associate degree
- complete all general education requirements as outlined on the General Education website

**More Information**

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ADA compliant checksheets are being developed for the 2019-2020 Catalog. If you would like to request an ADA compliant checksheet before the 19-20 catalog is published, please send your request to: FSUCurriculum@ferris.edu