

MACHINING & MANUFACTURING TECHNOLOGY

MANUFACTURING TECHNOLOGY



Course Description

The manufacturing industry has a high demand for skilled professionals with the foundation skills in machining metrology operations. Our program provides students with hands-on laboratory projects, career-based education, and industrial skill sets needed to succeed in these fields in the future.

Students enrolled in the program will work on project-based assignments graded on the skills they learn. Success in the class is proportionate to the effort of the students as they complete their tasks and assignments.

Working in a physically and mentally demanding environment, students will set up and operate manual machines while making tools that will last a lifetime.

Student Leadership Opportunities

Students have the opportunity for leadership, competition and community service through membership in SkillsUSA and MITES.

Success Indicators

- Creative
- Detail-oriented
- Organized
- Able to multitask
- Strong math skills
- Practical, hands-on problem solving

Course Overview:

Program Location: Lansing Community College (LCC) West Campus

Sessions Offered: AM/PM

Average Lecture Days/Week: 0-2 Days

Average Lab Days/Week: 3-5 Days

Academic Rigor: 4 out of 5

Homework: Occasionally

Required Expectations: Notetaking and organization, time management, physically demanding

Learning outcomes include, but are not limited to:

- Learn project planning/processing
- Learn machining methods
- Learn workholding principals
- Learn inspection tools and uses
- Learn to interpret complex prints and produce parts to the tolerances on them
- Participate in Skills USA, Ferris Machinist Competition, and MITES

College Credits (10)

- METM 108 - Machine Tool Operations (4)
- METM 195 - Quality/Metrology/Inspection (4)
- TECH 100 - Safety OSHA 10 (2)

Available Certifications:

- CPR/AED
- First Aid
- OSHA 10
- NC3 Meteorology

Updated 12/2025

FOR MORE INFO:
CONTACT YOUR COUNSELOR,
CALL 517.483.1596, OR
VISIT EATONRESA.ORG/CPC



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PROFESSIONAL CAREERS

- Advanced Programmer
- Aerospace Engineer
- Applications Specialist
- CNC* Applications Engineer
- CNC* Machinist
- CNC* Manufacturing Engineer
- CNC* Programmer
- CNC* Prototype Engineer

* CNC (Computer Numerical Control)

TECHNICAL CAREERS

- Automotive Machinist
- CNC* Maintenance Technician
- CNC* Operator
- Machine Tool Builder
- Machinist/Welder
- Metallurgist
- Quality Control Technician
- Tool & Die Maker

* CNC (Computer Numerical Control)

ENTRY-LEVEL CAREERS

- Assembly Technician
- CNC* Operator
- CNC* Setup Handler/Technician
- Entry-Level Programmer
- Lathe Operator
- Manual Machine Technician
- Manual Machinist
- Tool & Die Apprentice

* CNC (Computer Numerical Control)

ACADEMICS

EXPERIENCES

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Scan the QR code below to learn more and watch the program video.

**SCAN
ME!**



Capital Region Technical Early College (CRTEC)

Students enrolled in this program may choose to participate in the Capital Region Technical Early College (CRTEC) program. This is a high school-to-college program where students start in grade 11 and end their 13th year with a degree or certification. This program gives students relevant career related experiences.



**EXPLORE THE POSSIBILITIES.
FAST TRACK YOUR FUTURE.**