

# Machine Tool Operations

PROGRAM CODE: 31-420-1



Technical Diploma



COURSE	CREDITS
<b>MACHTL-360</b> Metrology ^ .....	1
<b>MACHTL-367</b> Machine Tool Technology.....	1
<b>MACHTL-384</b> Machine Trades Mathematics 1 ^ .....	1
<b>MDRAFT-385</b> Machine Blueprint Reading 1 ^ .....	1
<b>MACHTL-300</b> Engine Lathe 1 (Turning).....	3
<b>MACHTL-301</b> Engine Lathe 2 (Turning) ‡.....	3
<b>MACHTL-309</b> Manual Vertical Milling Machine 1 ^.....	3
<b>MACHTL-310</b> Manual Vertical Milling Machine 2 ‡ ^.....	3
<b>ENG-340</b> Workplace Communication .....	2
(or) ENG-195 Written Communication ‡	
<b>MACHTL-304</b> Introduction to CNC Programming ‡ ^.....	1
<b>MACHTL-385</b> Machine Trades Mathematics 2 ‡ ^ .....	1
<b>MACHTL-391</b> Quality Control ‡.....	1
<b>MDRAFT-386</b> Machine Blueprint Reading 2 ‡ ^ .....	1
<b>MACHTL-320</b> Introduction to CNC Turning Centers ‡.....	4
<b>MACHTL-322</b> Introduction to CNC Vertical Machining Centers ‡ ^.....	4
<b>MACHTL-325</b> Surface Grinding .....	4

**Location:** Downtown Milwaukee Campus

**Start Dates:** August and January

**Admission Requirement:** High school diploma or GED

Note: Students will need a tablet or mobile device to complete course requirements.

**Financial Aid Eligible:** Yes.

Apply at [fafsa.gov](https://fafsa.gov). Use School Code 003866.

### Program Description

Learn in-demand skills for machine tool operations. Students gain hands-on experience in Computer Numerical Control (CNC) machine setup and operation.

### Career Outlook

CNC machine tool operators with up-to-date experience are in demand.

### Program Learning Outcomes

- Apply basic safety practices in the machine shop.
- Interpret industrial/engineering drawings.
- Apply precision measuring methods to part inspection.
- Perform basic machine tool equipment setup and operation.
- Perform programming, setup and operation of CNC Machine Tools.

### CREDITS

Total credits needed to complete this diploma

# 34

‡ Prerequisite required.

^ Counts toward earning the CNC Setup and Operations certificate.

Program curriculum requirements are subject to change.

**Current MATC students should consult their Academic Program Plan for specific curriculum requirements.**



**Complete Program Details**

**QUESTIONS?** 414-297-8901 or [mctpathway@matc.edu](mailto:mctpathway@matc.edu)