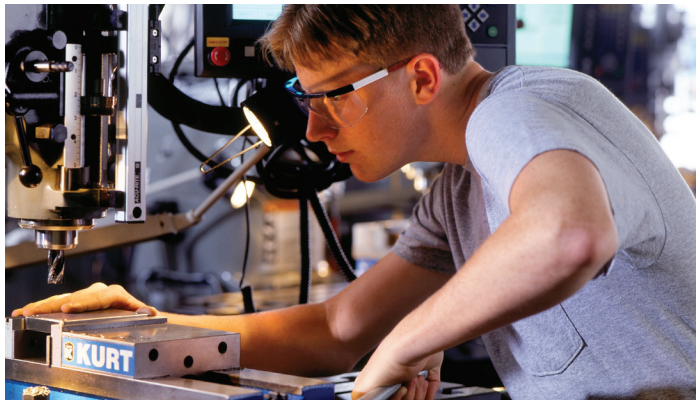


# Tool and Die Making

PROGRAM CODE: 32-439-1



Technical Diploma



**Location:** Downtown Milwaukee Campus (year one only), Oak Creek Campus

**Start Dates:** August and January

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

**Financial Aid Eligible:** Yes.  
Apply at [fafsa.gov](https://fafsa.gov). Use School Code 003866.

## Program Description

This is a four-semester, full-time, day program; the first two semesters are common with the one-year Machine Tool Operations program. All courses within the first year are based on the National Institute for Metalworking Skills (NIMS) Machining Level One Skill Standards in nine separate skill areas. During the third and fourth semesters, you will learn how to build and sample basic stamping dies and plastic injection molds.

## Career Outlook

There is an ongoing need for highly skilled tool and die makers and mold makers.

## Program Learning Outcomes

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



Complete Program Details

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

COURSE	CREDITS
<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 Machining 1 ^.....	3
<b>MACHTL-310</b> Manual Vertical Milling Machining 2 ‡ ^.....	3
<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>ENG-340</b> Workplace Communication .....	2
(or) ENG-195 Written Communication ‡	
<b>MACHTL-304</b> Introduction to CNC Programming ‡ ^.....	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
<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-386</b> Machine Trades Mathematics 3 ‡.....	1
<b>MTLGY-301</b> Basic Heat Treatment of Metals.....	1
<b>TDMKG-360</b> Basic Die Making Technology.....	1
<b>TDMKG-366</b> CNC Programming 2 ‡.....	1
<b>TDMKG-371</b> Stamping Die Making 1 ‡.....	4
<b>TDMKG-372</b> Stamping Die Making 2 ‡.....	4
<b>TDMKG-373</b> Stamping Die Making 3 ‡.....	4
<b>MACHTL-387</b> Machine Trades Mathematics 4 ‡.....	1
<b>TDMKG-361</b> Advanced Die Making Technology ‡.....	1
<b>TDMKG-362</b> Cavity Die Technology .....	1
<b>TDMKG-367</b> Basic CAD/CAM ‡.....	1
<b>TDMKG-381</b> Moldmaking 1 ‡.....	4
<b>TDMKG-382</b> Moldmaking 2 ‡.....	4
<b>TDMKG-383</b> Moldmaking 3 ‡.....	4

## CREDITS

Total credits needed to complete this diploma

**66**

‡ 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.**