Manufacturing, Construction & Transportation Academic & Career Pathway

Computer Numerical Control (CNC) Technician

PROGRAM CODE: **32-444-1**

TD

Technical Diploma

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

Start Dates: August and January

Admission Requirement: High school diploma or equivalent

Academic Preparedness Requirements: Completion of Machine Tool Operations technical diploma program and two years of hands-on CNC machine tool experience

Financial Aid Eligible: Yes. Use code 003866 at fafsa.gov.

Program Description

MATC's equipment includes industrial-based CNC machining centers and turning centers, and computer-aided design/computer-aided manufacturing (CAD/CAM) workstations. Students gain hands-on experience in all phases of programming and operations.

Career Outlook

Large and small manufacturers employ CNC machine operators/programmers. Due to the high number of industrial companies in southeastern Wisconsin, there is a need for skilled people.

Program Learning Outcomes

- Apply basic safety practices in the machine shop.
- Interpret 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.
- Perform advanced CNC machining operations.

Complete Program Details
QUESTIONS? 414-297-8901 or mctpathway@matc.edu

COURSES		CREDITS
MACHTL-360	Metrology ^	1
MACHTL-367	Machine Tool Technology ^	1
MACHTL-384	Machine Trades Mathematics 1 ^	1
MDRAFT-385	Machine Blueprint Reading 1 ^	1
MACHTL-300	Engine Lathe 1 (Turning) ^	3
MACHTL-301	Engine Lathe 2 (Turning) ‡ ^	3
MACHTL-309	Manual Vertical Milling Machine 1 ^	3
MACHTL-310	Manual Vertical Milling Machine 2 ‡ ^	3
ENG-340	Workplace Communication ^ (or) ENG-195 Written Communication ‡	2
MACHTL-304	Introduction to CNC Programming ‡ ^	1
MACHTL-385	Machine Trades Mathematics 2 ‡ ^	1
MACHTL-391	Quality Control ‡ ^	1
MDRAFT-386	Machine Blueprint Reading 2 ‡ ^	1
MACHTL-320	Introduction to CNC Turning Centers ‡ ^	4
MACHTL-322	Introduction to CNC Vertical Machining Centers ‡ ^	4
MACHTL-325	Surface Grinding ^	4
MACHTL-386	Machine Trades Math 3 ‡	1
CNC-302	Computer Application/CNC	1
CNC-324	CNC Machine Programming/Proveout 1 ‡	3
CNC-325	CNC Machine Programming/Proveout 2 ‡	3
CNC-326	Machining Center CAD/CAM Programming 1 ‡	3
CNC-327	Machining Center CAD/CAM Programming 2 ‡	3
MDRAFT-320	Coordinate Blueprint Reading ‡	1
CNC-320	Tooling and Fixturing	1
CNC-321	CNC Machine Technology	1
CNC-332	CNC Turning Programming/Proveout 1 ‡	3
CNC-333	CNC Turning Programming/Proveout 2 ‡	3
CNC-334	Turning Center CAD/CAM Programming 1 ‡	3
CNC-335	Turning Center CAD/CAM Programming 2 ‡	3
MTLGY-321	Metallurgy 1	1

CREDITS
Total credits needed to complete this diploma

64

‡ Prerequisite required.

^ Counts toward earning the Machine Tool Operations technical diploma.

Program curriculum requirements are subject to change.

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

MATC courses are offered in person, entirely online or partially online. Check each course's delivery options in Self-Service at **selfservice.matc.edu**.

This program is accredited by the National Institute for Metalworking Skills, 10565 Fairfax Boulevard, Suite 10, Fairfax, VA 22030; 703-352-4971; https://www.nims-skills.org/index.php/accreditation.

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