Machinist/CNC Technology, AAS

Academic Year 2026-2027

Program Description:

The Machinist/CNC Specialist program provides students the opportunity to prepare for entry level careers as machinists using conventional equipment and computer control equipment.

The graduate will have completed fundamentals required for all machining careers – industrial safety, blueprint reading and precision measurement. Technical courses develop skills using conventional machines and using computerized manufacturing equipment.

Participants in this program receive technical skills immediately useful in the workplace requiring CNC knowledge. They receive hands-on instruction in set up, operation, programming, maintenance, etc. on state-of-the-market CNC equipment used every day in industry. They also receive instruction in industrial communications, organizational skills, mathematics for machinists and safety.
Before graduation, each individual is required to pass all Level 1 NIMS CNC credentials.

Students entering the program in a fall term are required to take summer term courses to complete the sequence of courses and with aggressive completion of the general education component, can complete the program in 17 months.

The program adheres to the standards of the National Institute for Metalworking Skills (NIMS);

Career Outlook and Salary Forecast:

For the most current information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at www.bls.gov/ooh/.

Program Outcomes:

- Select appropriate tools and materials based on work orders
- Use precision measurement tools to accurately measure parts with proper math written outcomes
- Produce simple parts with accurate measurements within allowable tolerances on a manual mill and a manual lathe
- Produce accurate single and multiple machined parts from drawings within tolerance allowance without assistance
- Execute CNC programs to create simple parts on a CNC mill and CNC lathe
- Write G and M Code required to program a CNC mill and a CNC lathe to produce comples parts from drawings within tolerance allowance without assistance

Program Admission Requirements:

The CNC Specialist Program has admission and candidacy requirements in addition to the Mountwest Community & Technical College admission guidelines.

Employment Opportunities:

Contact Information:

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Machinist/CNC Technology - Major Code CM80	
Name:	**ID Number 942-**
Educational Counselor:	
Faculty Advisor:	

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
Fall Term 1							
MAT 135	Technical Math	Fall	3				
MT 106	Manufacturing Skills I	Fall	1				
MT 118	CNC Mill Loader Operator	Fall	2				
MT 121	Introduction to Machinery	Fall	6				
MT 200	Blueprint Reading, Precision Measurement & Inspection	Fall	4				
			16				
Spring Term 2							
MT 126	Manufacturing Skills II	SP	1				
MT 215	Metal Working Theory and Application	SP	6				
MT 233	NIMS Credentialing/Manual Machining	SP	6				
MT 241	Introduction to CNC Machining	SP	4				
			17				
Summer Term 3							
MT 244	CNC Set UP/Operations	SU	6				
MT 248	NIMS Credentialing/CNC Project	SU	5				
			11				
Fall Term 4							
	Restricted Elective (MT, MFE, WELD)[2]	Fall	4				
COM 125	Interpersonal Communication	Fall	3				
ENL 101 or ENL 131	Written Communication or Technical Report Writing[1]	Fall	3				
IT 101	Fundamentals of Computers	Fall	3				
	General Education Elective[3]	Fall	3				
			16				
	HOURS REQUIRED FOR GRADUATION: 60						

[1] ENL 101/131 has a prerequisite of ACT 18, SAT 480, Accuplacer 250-300 or be placed in ENL 101E or 131E.
[2] Restricted Electives include:
Choose any 4 hours from the following list:
Any MT class not already included in the curriculum, any MFE course, WELD 112, WELD 115, or WELD 141
[3] Choose from and Math, Science, Social Science, English, Communications, history, or Humanities course.

Successful completion of the first semester MT courses, students will be awarded a skill set for CNC Operator
Successful completion of the second semester MT courses, students will be awarded a skill set for Manual Machinist
Successful completion of the third semester (summer term) MT courses, students will be awarded a skill set for CNC Machinist.