

Program Name: Machining Technician
Program Number: 32-444-2
Required DML: Portfolio Artifacts

Student Name:
MPTC Six-Digit Student ID #:
Semester of Program Acceptance:

***** At Least One Artifact Is Required For Each Learner Outcome Listed Below *****

Directions: In columns A and B, enter dates when items are completed. Check Column C if transcript is used. Electronic format is recommended for portfolio development. **Note: Keep original portfolio. Submit copy only.**

Your Student Portfolio will be evaluated by educators and advisory committee members and becomes the property of Moraine Park Technical College.

	ARTIFACT		
	A	B	C
	Work Sample Linked to Outcome	Self Assessment/ Reflection Statement	Transcript Used
EXIT LEARNING OUTCOMES			
Program Learner Outcomes			
Build a mold die (Tool and Die Making track only)			
439-335 Single Cavity Mold Making			
439-336 Single Cavity Mold Making Applications	Opener Mold		
439-337 Multi-Cavity Mold Making			
439-338 Multi-Cavity Mold Making Applications	Team Mold		
Build jigs and fixtures			
439-304 Jigs and Fixtures	Fixture or Jig		
Build stamping dies (Tool and Die Making track only)			
439-325 Pierce and Blank Die Making			
439-326 Pierce and Blank Die Making Applications	1st Die, Blue Print 2nd Die		
439-327 Compound and Progressive Die Making			
439-328 Compound and Progressive Die Making Applications	2nd Die, Group Die		
Determine the effects of material type on machining			
617-150 Material Selection	Research Paper on Tooling and Machining Techniques		
444-360 Machining Center Operator	Precision Vise		
444-370 Turning Center Operator	Chess Pieces		
444-380 EDM (Electrical Discharge Machine) and Nonconventional Machining	Fluer		
Identify materials used in all facets of tool and die making			
617-150 Material Selection	Research Paper on Tooling and Machining Techniques		
Interpret part drawings			
439-398 Mold and Die Print Reading	Basic Machining App Projects, 1-2-3 Blocks V Block Base		
Measure precision parts			
444-332 Coordinate Measuring Machines (CMM) Programming, Introduction to	CMM Test Block		
444-333 Basics of Metrology	Micrometer L.D.		
Operate CADD systems			
444-345 Design for 3D Machining	Business Card Holder		
617-116 AutoCAD, Beginning Level	Drawing H12		

		ARTIFACT		
		A	B	C
		Work Sample Linked to Outcome	Self Assessment/ Reflection	Used
Program Learner Outcomes (continued)		No Artifact Is Listed In This Column		
		Suggested Work Sample from Performance Asmt		
Operate CAM systems				
439-339 Computer-Aided Maching (CAM) 2D - Surfcar.		Chess Board		
444-340 Computer-Aided Machining 2D - Part 2		Wishbone		
444-341 Computer-Aided Machining 3E		High Speed 1		
Operate computer numerical control machine tools				
444-360 Machining Center Operator.		Setup Blocks		
444-370 Turning Center Operator.		Chess Pieces		
444-380 EDM (Electrical Discharge Machine) and Nonconventional Machining		Name Plates		
Operate conventional machine tools				
439-310 Machining, Basic				
439-311 Machining Applications, Basic		Basic Machining App Projects, 1-2-3 Blocks V Block Base		
439-312 Machining Technologies				
439-313 Machining Technologies Applications		Tap Guide Block		
Program computer numerical control machine tools				
444-332 Coordinate Measuring Machines (CMM) Programming, Introduction tc		CMM Test Block		
444-351 Machining Center Programming		CMM Test Block		
444-371 Turning Center Programming		Chess Pieces		
444-380 EDM (Electrical Discharge Machine) and Nonconventional Machining		Fluer & Name Plate		
Set up computer numerical control machine tools				
439-326 Pierce and Blank Die Making Applications				
439-328 Compound and Progressive Die Making Applications				
444-332 Coordinate Measuring Machines (CMM) Programming, Introduction tc		CMM Test Block		
439-336 Single Cavity Mold Making Applications				
439-338 Multi-Cavity Mold Making Applications				
444-350 Basic Programming		Project II		
444-360 Machining Center Operator.		Setup Blocks		
444-370 Turning Center Operator.		Chess Pieces		
444-380 EDM (Electrical Discharge Machine) and Nonconventional Machining		Fluer & Name Plate		
Set up conventional machine tools				
439-311 Machining Applications, Basic		App Projects, 1-2-3 Blocks Tap Guide Blocks		
439-312 Machining Technologies				
439-313 Machining Technologies Applications				
439-326 Pierce and Blank Die Making Applications		V-Block Base		
439-328 Compound and Progressive Die Making Applications				
439-336 Single Cavity Mold Making Applications				
439-338 Multi-Cavity Mold Making Applications				
801-310 Occupational Communication OR 801-196 Oral and Interpersonal Communications				

	Artifact Is Listed In This Column Suggested Work Sample from Performance Asmt	ARTIFACT		
		A Linked to Outcome	B Assessment/ Reflection	C Used
General Education Learner Outcomes				
Apply organizational and stylistic strategies to fit subject, audience, and purpose in communication <i>801-196 Oral/Interpersonal Communications OR 801-310 Occupational Communication</i>				
Evaluate content, organization, supporting materials, credibility, and style of communication for decision-making. <i>801-196 Oral/Interpersonal Communications OR 809-300 Occupational Success Strategies</i>				
Perform mathematical calculations. <i>804-360 Occupational Math 1 AND 804-361 Occupational Math 2 AND 804-362 Occupational Math 3</i>				
Core Ability Outcomes				
Complete a Core Abilities self-assessment reflection. <i>890-125 Student Success</i>				
Complete reflection essays on Core Abilities and Occupational Skills development. <i>890-130 Career Development</i>				
Work Cooperatively <i>Complete assigned tasks for team/group work. Use collaborative strategies to complete tasks. Exchange information, ideas, and opinions in a team/group setting Show evidence of respect for diversity.</i>				
Act Responsibly <i>Complete assigned tasks according to prescribed deadlines. Complete assigned tasks according to prescribed criteria. Adhere to established attendance criteria.</i>				
Value Self Positively <i>Adapt hygiene and appearance to requirements of work and educational environment Identify personal strengths and areas for improvement. Exchange information, ideas, and opinions in a team/group setting Show evidence of respect for diversity.</i>				
Think Critically and Creatively <i>Distinguish between fact and opinion. Synthesize information from a variety of sources. Use problem-solving and decision-making strategies. Apply global perspective to decisions and actions.</i>				
Communicate Clearly <i>Use bias-free language. Use language that is free of obscenities. Apply listening skills. Apply standard rules of language structure including grammar, spelling, and punctuation</i>				
Work Productively <i>Complete assigned tasks according to established conditions. Evaluate work using established criteria.</i>				

Core Abilities (continued)				
Learn Effectively				
<i>Use resources to meet learning needs.</i>				
<i>Organize information.</i>				
<i>Produce evidence of learning.</i>				