

Journeyman Machining Technology, Certificate I

School of Technology

This program prepares students for entry-level employment in both the manual and computer numerical control (CNC) machining industries. Students will learn the basic use of machine shop hand tools, mills, lathes and grinders. Students will produce and execute G-code programs on CNC mills and lathes. Students will learn to read and interpret both conventional and GD&T blueprints. Students will also gain the mathematical skills necessary to machine shop production.

This is the first of four certificate programs for students pursuing the Journeyman Machining Technology AAS.

Career Opportunities

Graduates of this program can expect to be employed as entry-level machinists, tool and die makers, metalworkers, CNC programmers and CNC operators. These classes may also be used toward a Pennsylvania Journeyman Certification with shops associated with Westmoreland.

Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Use basic shop hand tools to produce simple parts.
- Operate manual mills, lathes and grinders.
- Write and troubleshoot CNC G-code programs.
- Execute programs on CNC mills and lathes.
- Interpret conventional and GD&T blueprints.
- Use mathematics to solve shop equations.

Sugg. Term	Seq #	Course ID	Course Title	Cr	Prereq/Coreq(Co)	Options Available
Fall	1	PDV 101	First Year Seminar	1		
	2	CNC 111	Computer Numerical Control I	4	MTH 052, Placement, or Instructor Permission (Co)	
	3	MTT 101	Blueprints	4	MTH 052, Placement, or Instructor Permission (Co)	
	4	MTT 111	Machining I	4	MTH 052, Placement, or Instructor Permission (Co)	
	5	MTH 104	Introduction to Applied Mathematics	4	MTH 050, 050A or Placement	

Total Program Credits

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