Journeyman Machining Technology, Diploma
School of Technology

Program Description

This program is specifically designed for those who are employed full-time and are seeking to complete the classroom training hours for the Pennsylvania Journeyman Certification by taking one course per semester. This state certification can subsequently be achieved by completing the required number of shop experience hours with companies who are set up with the state in association with the Westmoreland classroom program.

Students will learn to read and interpret prints, use common hand tools, set up and operate metal cutting machines including mills, lathes and grinders, and use precision measuring equipment. Students will also learn to create machine code programs for CNC equipment and load, troubleshoot and execute the programs on CNC mills and lathes.

Students will receive 33 college level credits toward an AAS degree. The Journeyman Machining Technology degree may be achieved by completing the necessary additional credits.

Career Opportunities

Graduates of this program can expect to increase their employability as machinists, tool and die makers, metalworkers, CNC programmers and CNC operators.

Program Learning Outcomes

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

- Select appropriate materials and processes to produce parts.
- Interpret conventional and GD&T blueprints.
- Utilize mathematics in the layout and production of parts.
- Design parts and fixtures using CAD drafting software.
- Produce G-code machine programs using CAM software.
- Effectively plan and sequence work operations.
- Produce quality parts and fixtures using various materials.
- Inspect parts based on tolerance specifications.
- Analyze and solve hardware and production problems.
- Communicate effectively and appropriately.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1		
	2	CNC 111	Computer Numerical Control I	4		
	3	MTT 101	Blueprints	4		
	4	MTT 111	Machining I	4		
	5	MTH 104	Introduction to Applied Mathematics	4	MTH 050 or Placement	
1st Spring	6	CNC 112	Computer Numerical Control II	4	CNC 111; Co: MTH 104	
	7	MTT 207	Tool Design	3	MTT 111 and CNC 111	
	8	MTT 202	Maintenance	3	MTT 111	
	9	ENG 161	College Writing	3	ENG 085 or Placement	
	10	DFT 112	Introduction to Design, Materials, and Processing	3		
Minimum Program Credits				33		JOUR