PRECISION MACHINING

2020-2021

Precision Machining is designed for students interested in careers in areas such as: machining, tool and die, CNC programming/operation, millwright, robotics, and engineering. This program offers a high earning potential and a wide array of career choices. Students learn to apply the concepts of the various manufacturing technologies on both manual and state-of-the-art machines. Precision Machining is part of the Advanced Manufacturing Academy. Senior students have the opportunity to engage in advanced-elective course work in any of the manufacturing areas: Computer-Aided Design, Precision Machining, Robotics & Automation, and Welding. This opportunity provides students with a more diverse skill-set to enter a career in manufacturing.

Program Highlights:

- Utilize advanced computer-controlled technology to design, create and build high-tech precision parts and tools used worldwide in everyday products
- Program and operate advanced robotic equipment to perform a variety of manufacturing applications
- · Program and control industrial CNC machines to produce products from engineering blueprints to print specifications

The Program Focuses on the Following State Approved Courses:

- Automated Materials Joining Technology Course 1 -Introduction to Automated Materials Joining
- Machine Tools
- Machining with Industrial Lathes

COST-FREE COLLEGE CREDIT OPPORTUNITIES

College Credit Plus through Owens Community College

- CAD 125: Production Drawing (3 Credit Hours)
- CAM 122: CNC Mill Applications (2 Credit Hours)
- CAM 160: Machining I (2 Credit Hours)
- CAM 161: Machining II (2 Credit Hours)

Career Technical Assurance Guides (CTAGs)

- CTS001: OSHA 10-Hour Safety (1 Credit Hour)
- CTMET006: CNC Programming/Machining (3 Credit Hours)

- CAM (Computer Aided Manufacturing)
- Computer Numerical Control Technology with Industrial Mills-Lathe



- Ohio State Apprenticeship Council Recognized Pre-Apprenticeship Program Certificate of Completion (12 points)
- NIMS Machining Level 1 Certification (12 Points)
- OSHA 10-Hour Training (1 Point)

OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY					
OCCUPATION TITLE	TYPICAL SALARY- BOTTOM 10%	TYPICAL SALARY- MEDIAN	TYPICAL SALARY- TOP 10%	EDUCATION LEVEL	ANNUAL JOB OPENINGS
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic*	\$24,830	\$35,670	\$60,170	HS Diploma or Equivalent	1,430
Machinists*	\$27,810	\$42,550	\$64,360	HS Diploma or Equivalent	2,860
Computer-Controlled Machine Tool Operators, Metal and Plastic*	\$27,970	\$39,880	\$58,050	HS Diploma or Equivalent	1,330
Tool and Die Makers*	\$32,920	\$50,450	\$74,400	Postsecondary Non-degree Award	650
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic*	\$36,830	\$50,900	\$81,130	Postsecondary Non-degree Award	250
First-Line Supervisors of Production and Operating Workers*	\$38,420	\$60,870	\$96,460	HS Diploma or Equivalent	2,900
Manufacturing Engineers*	\$51,610	\$90,780	\$148,450	Bachelor's Degree	530
JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF OCTOBER 2020; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.					
*Denotes an In-Demand Occupation in the State of Ohio					

Instructor: Bob Golden 419.666.1120 Ext. 1407 rgolden@pentacc.org Supervisor: Phil Stockwell 419.661.6358 pstockwell@pentacc.org Career Services: Marshall Wolf 419.661.6372 <u>mwolf@pentacc.org</u> Admissions: Tricia Hornyak 419.661.6498 <u>thornyak@pentacc.org</u>







TECHNICAL CAREERS —

- Machinist
- Maintenance Machinist
- Millwright
- Quality Control Inspector
- Mold Maker
- Pattern Maker
- Tool & Die Maker
- Instrument Maker
- CNC Programmer
- CNC Machinist
- Machine Builder
- Robot Programmer



ACADEMICS

EXPERIENCES



PASSION

PROFESSIONAL CAREERS

- Manufacturing Engineer
- Quality Manager
- Aerospace Manufacturing
 Manager
- Medical Device Manufacturing Engineer
- Computer Automated Manufacturing Engineer
- Manufacturing Sales Engineer
- Aeronautical Engineer
- Aerospace Engineer
- Metallurgist
- Instructor
- Quality Engineer
- Plant Engineer

ENTRY-LEVEL CAREERS

- Machine Operator
- CNC Operator
- Robot Operator
- Material Handler
- Assembler
- Packager
- Press Operator
- Quality Assistant
- Apprentice
- Stock Cutter/Handler
- Inspector
- Manual Machine Tool Operator

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