



PROGRAMS OF **study**



PRECISION MACHINING TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE

Program Description

This program prepares individuals with the technical knowledge and skills to use machine tools that are either conventionally controlled or computer numerically controlled, such as lathes, and milling machines to produce precision parts. The curriculum is designed to provide broad multi-disciplinary instruction in blueprint reading; machining; lathe and mill operations; liberal arts, applied mathematics; computers; Computer Aided Design/Machining (CAD/CAM) systems; Computer Numerically Controlled (CNC) setup, programming, operations, and troubleshooting; shop and safety practices; equipment capabilities; and regulations and laws.

Program Learning Outcomes

Students who successfully complete the Associate in Applied Science Degree in Precision Machining Technology will be able to:

- Recognize and apply appropriate machining terminology in a variety of manufacturing settings
- Utilize technical knowledge and skills during the fabrication of precision parts
- Demonstrate responsible and ethical safety practices in a manufacturing environment
- Recognize the value of diversity in opinions, values, abilities, and cultures of colleagues and clients in a manufacturing environment
- Demonstrate accuracy in measurements and calculations required to produce precision parts
- Describe and apply quality control techniques and strategies to a wide range of manufacturing procedures
- Produce precision parts using a variety of computer-controlled and manually controlled machine tools



Career Opportunities

Machinists set up and operate a variety of computer-controlled or manually-controlled machine tools to produce precision parts, instruments, and tools. Positions may include: machine operators, machinist or CNC machinist, CAD modeler, and CNC programmer.

PRECISION MACHINING TECHNOLOGY A.A.S. ASSOCIATE IN APPLIED SCIENCE

The sequencing of courses in this program begins in the fall semester.

Students entering in the spring or summer will likely take longer than two years to complete the program.

Curriculum Requirements: 61 credits	Credits	Grade	Semester
First Year, Fall Semester (16 credits)			
PMT 110 Precision Machining I	4		
PMT 125 Principles of CNC	3		
CAD 115 Blueprint Reading	3		
ENG 101 College Composition	3		
Math, General Education Core IV	3		
First Year, Spring Semester (16 credits)			
PMT 150 Precision Machining II	4		
PMT 175 CNC Programming and Operations I	3		
CAD 107 Solid Modeling I	3		
General Education Core I	3		
General Education Core II	3		
Second Year, Fall Semester (16 credits)			
PMT 210 Precision Machining III	4		
PMT 215 CNC Programming and Operations II	3		
CAD 214 Geometric Dimensioning and Tolerancing	3		
General Education Core III	3		
General Education Core IV	3		
Second Year, Spring Semester (13 credits)			
PMT 250 Precision Machining IV	4		
Program Elective	3		
General Education Core I-IV	3		
Open Elective	3		

Required Equipment Students are required to wear OSHA approved work boots or shoes with toe protection and OSHA approved safety glasses while working in the lab.

Courses with a PMT designation will be held at the Precision Machining Technology building located in Sanford, Maine. Students will be required to provide their own transportation.

*Articulation agreements exist between York County Community College and various colleges and universities.
Please, contact Career and Transfer Services for information regarding these agreements.*

DISCLAIMER

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