

PRECISION MACHINING TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE DEGREE AND CERTIFICATE PROGRAMS

Virtually all manufactured products depend on America's precision machining industry at some point during their production. As new technologies continue to shape the manufacturing industry, companies have an immediate demand for machinists with college-level skills. A precision machinist (PMT) works very much like a sculptor, transforming raw material into something of great value. Additionally, the one-year welding certificate is designed to provide entry level welding skills.

"I know that sitting in a classroom is not for me, but the PMT program was so much more. I did real things that were hands-on that gave me confidence to build real stuff. KVCC's PMT program was challenging but working in the lab was addictive. The better I got at making things, the more I wanted to do it."

Develop skills to design and make fine metal parts using computer numerical control machines



What Precision Machining Technology graduates do:

- Remove metal with lathes, mills, and drills
- Fabricate metal-based parts
- Use software to run CNC-based equipment
- Calculate and measure angles
- Design products to specifications
- Innovate better methods
- Observe and enforce safety procedures
- Maintain machines

Career Opportunities:

- Manufacturing plants
- Small businesses
- Fabrication plants
- Machine shops
- Automotive companies
- Technical training centers

For further questions about this program, please contact: kvccadmissions@maineccc.edu

PRECISION MACHINING TECHNOLOGY

Precision Machining Technology Operator Certificate

First Semester

BPT126*	Technical Print Reading & Sketching	3
PMT101*	Precision Machining I	7
PMT111*	Precision Machining II	7

Total Credits

17

Precision Machining Technology Machinist Certificate

First Semester

BPT126*	Technical Print Reading & Sketching	3
MAT114*	Technical Math	3
PMT101*	Precision Machining I	7
PMT111*	Precision Machining II	7

Second Semester

ENG108	Technical Writing	3
PMT110*	Introduction to Master Cam	3
PMT125*	Geometric Dimensioning & Tolerancing	3
PMT201*	Precision Machining III	7

Total Credits

36

CRITERIA FOR GRADUATION

Students in the Precision Machining Technology program must complete 64 credits for an Associate Degree in Career Studies, or 36 credits for a Certificate, or 17 credits for an Operator's Certificate, and achieve a minimum grade of "C" in all core courses (*), and attain a final GPA of 2.0 or higher. (H,SS) Suggested Electives.



PRECISION MACHINING TECHNOLOGY

Certificate

DESCRIPTION

The Precision Machining Technology program offers a one-year Machinist Certificate, and a CNC Operator Certificate. Both offerings are stackable to allow a pace convenient to students. The program is designed to prepare traditional and non-traditional students for entry level positions.

Students will be trained in the conventional areas (lathe, mills, drills and grinders), as well as in Computer Numerical Control (CNC). A working knowledge of the machinery's handbook will provide graduates the knowledge to be contributors in any environment they work. The curriculum will include both technical and general courses necessary for students to successfully compete in the work environment. A laptop computer with detailed specifications (other than a Mac) is required. Students will be using Mastercam CAD/CAM software extensively for creating CNC programs. 3D modeling software is used to design and build working models of projects. Class schedules are designed for students to earn while they learn. A combination of hands on, Hybrid, and online classes create an opportunity for tremendous earning potential while working within the industry. 100% job placement is normally obtained within the industry after successful completion.

PROGRAM MISSION

The Precision Machining Technology program is committed to providing the skills, knowledge, and understanding needed to obtain entry-level employment in the metal-products industry. Advanced fields such as programming, engineering, and management are all possible in this field.

The program provides communication skills and the ability to recognize the need for lifelong learning. Using high academic standards in a learning environment that is safe and supportive, the participant is expected to develop the necessary skills for a variety of occupations in the metal trades industry.

EDUCATIONAL OUTCOMES

Upon successful completion of the Precision Machining Technology program, a graduate is expected to:

1. Practice the skills needed to be successful in the metal working industry and to be safety conscious and accountable to himself/herself and the safety of others while expanding his/her knowledge in his/her chosen profession.
2. Communicate clearly and effectively while responding appropriately to a variety of processes common to the precision machining industry.
3. Be able to work with others and think as a team member to solve problems that could affect long- range outcomes of specific projects.

COLLEGE ADMISSION

General admission guidelines can be found on [page 33](#) in the catalog.