

Machinist Technician Tier I

Certificate of Technical Studies Degree

This program is currently under review - please contact Flathead Valley Community College: http://catalog.fvcc.edu/preview_program.php?catoid=4&poid=738&returnto=223

This program will be taught through a course-sharing arrangement with Flathead Valley Community College in Kalispell, Montana.

The Industrial Machine Technology program provides instruction in the theory and operation of mills and lathes, both manual and CNC, other tools related to the machinist trade, and associated programming.

More information about this program can be found at: http://catalog.fvcc.edu/preview_program.php?catoid=4&poid=738&returnto=223

Outcomes

Graduates are prepared to:

- Use tools and equipment to form and shape various materials in a manufacturing laboratory environment
- Discuss processes necessary to cast and mold materials in a manufacturing laboratory environment
- Use tools and equipment to machine various materials
- Safely operate basic machinery and equipment
- Read and understand the various symbols and features of a blueprint
- Distinguish between various views represented on typical manufacturing blueprints
- Locate materials list and identify the material call-outs on lists of materials
- Read and interpret information on various manufacturing blueprint drawings
- Identify features contained on a blueprint in relation to actual work piece and identify features of the design part in relation to machining production methods
- Identify and apply quality control procedures to ensure product integrity
- Accurately measure and record dimensions with micrometers and calipers
- Define quality assurance and quality measurements associated with a machined part
- Demonstrate quality assurance and quality management techniques
- Accurately measure and identify various types of threads
- Perform job set-up
- Perform manual operations
- Organize and develop a logical written representation of one's thoughts; craft and execute a variety of professional quality correspondence, including a resume
- Utilize and apply mathematical operations, measurement, introductory geometric principles, and applied algebra into technical applications in academic and workplace situations
- Recognize a situation that requires first aid and/or CPR, and then use the appropriate skills for that situation

Estimated Cost

Estimated Resident Program Cost*

Tuition and Fees	\$1,565
Application Fee	\$30
Online Course Fees	\$285
Course Fees	\$350
Tools/clothing	varies
Books/Supplies	\$500
Total	\$2,730

* **Fall 2017 MUS Student Health Insurance Premiums will be changing. Please check the Health Insurance website (<http://students.gfcmu.edu/insurance.html>) and/or Student Central for confirmed premium rates. Students will be charged an additional fee of \$21 per credit for online/hybrid courses.**

Program Requirements

Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedules.

Course	Title	Credits	Grade/Sem
Fall Semester			
ECP 104	Workplace Safety +	1	_____
M 111	Technical Mathematics **,+	3	_____
MCH 101	Introduction to Manufacturing Processes +	1	_____
MCH 120	Blueprint Reading and Interpretation for Machining +	3	_____
MCH 129	Machine Quality Control and Precision Measurements +	3	_____
MCH 132	Introduction to Engine Lathes **,+	4	_____
MCH 134	Introduction to Mills +	4	_____
Total		19	_____

* Indicates prerequisites needed.

** Placement in course(s) is determined by placement assessment.

+ A grade of C- or above is required for graduation.