

MANUFACTURING TECHNICIAN - CAREER PATHWAY CERTIFICATE OF COMPLETION (CPCC)

Description

The Manufacturing Technician Career Pathway Certificate provides entry-level skills to students in various manufacturing trades.

Learning Outcomes

1. Demonstrate the ability to safely perform routine workplace tasks in a manufacturing/fabrication environment.
2. Demonstrate introductory level skills with the standard tools found in a manufacturing/fabrication environment. (blueprint reading, engine lathe, vertical mill, SMAW, GMAW, CAD/3D modeling)

Entrance Requirements

Academic Entrance Requirements

- Recommended:
 - High school diploma or GED.
 - Completion of MTH 060 Beginning Algebra I or minimum placement Math Level 10.
 - Successful completion of or current enrollment in MFG 100 MFG Orientation.
 - College level computer skills.

Additional Program Costs (beyond standard tuition/fees and textbooks)

Material Costs

- Welding personal protective equipment and tools: \$250.
- Textbook/Coursepack: \$20

Enrollment Fees

- Fees on specific MFG courses: \$200

Course Requirements

Course	Title	Credits
Core Courses		
MFG 101	Blueprint Reading	3
MFG 103	Welding Technology I	4
MFG 110	Manufacturing Processes I	4
MFG 119 or MFG 119M	Manufacturing Design and Drafting Techniques Mechanical Drawing Techniques	4
Total Credits		15

Advising Notes

Nearly all MFG courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than many other COCC programs.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. This is particularly important if developmental work is needed.

This career pathway certificate is designed for students planning to enter the manufacturing workforce upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any manufacturing program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Most of the skills development courses in this program require 2 hours a week in the welding lab for each credit. This normally means students will need to schedule 24 hrs or more each week in the lab. The welding lab is staffed M-Th 9 am to 8 pm (40 hrs/week).

Performance Standards

- Academic Requirements:
 - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
 - All courses in the program must be completed with a grade of C or higher.

Sample Plan

First Year		Credits
First Term		
MFG 101	Blueprint Reading	3
MFG 103	Welding Technology I	4
MFG 110	Manufacturing Processes I	4
MFG 119 or MFG 119M	Manufacturing Design and Drafting Techniques Mechanical Drawing Techniques	4
Credits		15
Total Credits		15