MACHINE TOOL TECHNOLOGY - BASIC TECHNICAL CERTIFICATE (BTC)

Explore More About This Program: https://cwi.edu/program/machine-tool-technology

Certificate Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Manufacturing and Welding
- **Program Code:** MACH.BTC
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** No

Certificate Requirements

Course	Course Title	Min Credits
Major Requirements		
MACH 103	Machine Shop Laboratory I	3
MACH 104	Machine Shop Laboratory II	3
MACH 126	Related Blueprint Reading I	2
MACH 153	Machine Shop Theory I	2
MACH 154	Machine Shop Theory II	2
Minimum Credit Hours Required		**12**

NOTE: This certificate is not eligible for federal financial aid due to program length.

Plan of Study Guide

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this Plan of Study Guide. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your Student Success Advisor for any questions regarding this course sequence plan.

First Year		
Fall		**Credit Hours**
MACH 103	Machine Shop Laboratory I	3
MACH 104	Machine Shop Laboratory II	3
MACH 126	Related Blueprint Reading I	2
MACH 153	Machine Shop Theory I	2
MACH 154	Machine Shop Theory II	2
	Total Semester Credit Hours	**12**
	Minimum Credit Hours Required	**12**

NOTE: This certificate is not eligible for federal financial aid due to program length.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge and application of safe work habits in all phases of machine shop operation.
- Demonstrate knowledge and application of basic setup, operation, and maintenance of manual milling machines.
- Demonstrate knowledge and application of basic manual engine lathe set-up techniques and operations.
- Perform and utilize basic setup techniques, tool and hardware selection, and process planning.
- Apply basic interpretation of machine shop specific detail and assembly drawings emphasizing machining operations and materials.
- Work professionally and productively with others through collaboration and teamwork in a shop or lab environment.