

MACHINE TOOL TECHNOLOGY - BASIC TECHNICAL CERTIFICATE (BTC)

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

Certificate Requirements

Course	Course Title	Min Credits
Major Requirements		
MACH 103	Machine Shop Laboratory 1	3
MACH 104	Machine Shop Laboratory 2	3
MACH 126	Related Blueprint Reading 1	2
MACH 143	Related Machine Shop Mathematics	3
MACH 153	Machine Shop Theory 1	2
MACH 154	Machine Shop Theory 2	2
Minimum Credit Hours Required		15

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

Plan of Study Guide

Below is the required sequence of courses that you need to take in order to complete your program requirements. Please register for each semester as shown below 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 1	3
MACH 104	Machine Shop Laboratory 2	3
MACH 126	Related Blueprint Reading 1	2
MACH 143	Related Machine Shop Mathematics	3
MACH 153	Machine Shop Theory 1	2
MACH 154	Machine Shop Theory 2	2
Total Semester Credit Hours		15
Minimum Credit Hours Required		15

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

Program Outcomes

The following are student learning outcomes for the Basic Technical Certificate in Machine Tool Technology at CWI:

- 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.