



## **CNC Machine Technology C.A.**

Curriculum Code: 1798

Effective: Fall 2019 – Summer 2024

### **Description**

This certificate is designed for a person interested in developing or advancing his/her skill set in the machinist or tool & die trade. Students receive hands-on instruction in manual machining, advanced computer numerical control (CNC) machining/programming, advanced computer aided machining (CAM), basics of geometric dimensioning and tolerancing, blueprint reading, and manufacturing principles. Employment possibilities include entry-level positions in manufacturing companies. Technical math, blueprint reading, and metallurgy are just some of the skills and knowledge that are necessary for this type of work.

### **Additional Information**

All course work will apply to the Associate in Applied Science Degree in Manufacturing Engineering Technology.

### **Contact Information**

Contact the Trades Technology Program, West Campus Building, Room M103, telephone number 517-483-5338, Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

### **Program of Study Required Courses**

Course Code	Course Title	Credit / Billing Hours
METD 100	Basic Mechanical Drafting	3 / 4
METD 130	Geometric Dimension/Tolerance	4 / 6
METM 108	Machine Tool Operations	4 / 6
METM 112	Introduction to CNC Machining	4 / 6
METM 150	Advanced CNC Machining	4 / 6
METM 190	Metallurgy and Heat Treatment	4 / 6
METM 195	Quality/Metrology/Inspection	2 / 3
METM 220	Basic Mastercam	4 / 6
METM 221	Advanced Mastercam	4 / 6
METS 102	Industrial/Construction Safety	2 / 3

### **Total Credit Hours**

35 credits / 52 billing hours

## Recommended Course Sequence

Semester I	Semester II
METD 100 METM 108 METM 190 METS 102	METD 130 METM 112 METM 220

Semester III
METM 150 METM 195 METM 221