

MANUFACTURING TECHNOLOGIES WELDING CNC, COA

Program Description

The Certificate of Achievement, Manufacturing Technologies Welding CNC provides the student with beginning-level training and skills in the operation of the CNC machining process.

Recommended Course Schedule

1st semester		Units
Communications		3
OSH 222	General Industry Safety	1
WELD 211	Welding I	3
WELD 212	Welding I Practice	2
WELD 206	CNC PAC I Practice	2
WELD 205	CNC PAC I	3
Semester Total		14
2nd semester		Units
MPT 120	Automated Production Concepts II	3
MPT 140	Quality Control	3
WELD 221	Welding II	3
WELD 222	Welding II Practice	2
WELD 255	CNC PAC II	3
WELD 256	CNC PAC II Practice	2
Semester Total		16
Total Units		30

Requirement is satisfied through embedded curriculum in Certificate Requirements

Certificate Requirements

WELD 211	Welding I	3
WELD 212	Welding I Practice	2
WELD 221	Welding II	3
WELD 222	Welding II Practice	2
MPT 120	Automated Production Concepts II	3
MPT 140	Quality Control	3
OSH 222	General Industry Safety	1
WELD 205	CNC PAC I	3
WELD 206	CNC PAC I Practice	2
WELD 255	CNC PAC II	3
WELD 256	CNC PAC II Practice	2

Total Units 30

Program Outcomes

Students completing the certificate will:

PSLO1: Be proficient in two welding processes.

PSLO2: Be proficient in the beginning level procedures and concepts of programming, set up, and operation of CNC equipment.

PSLO3: Interpret blueprints that translate into the production of the part to print specification using CNC equipment.

PSLO4: Effectively communicate with instructor and students.

PSLO5: Work safely with equipment as per industry standards.

Program Requirements

Certificates of Achievement are a set of courses that can serve as a stepping stone to an associate degree or allow students to enter the workforce. Certificates of Achievement have a general education component.

To earn a Certificate of Achievement, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 semester credit hours within the college.
3. Satisfy General Education requirements for the Certificate of Achievement (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
General Education Requirements		
	<i>Communications</i>	3
	<i>Human Relations</i>	
Requirement is satisfied through embedded curriculum in Certificate Requirements		
	<i>Mathematics</i>	