

MANUFACTURING CERTIFICATE

This certificate prepares students for frontline operator positions in advanced manufacturing. Students will gain an understanding of foundational principles, tools, and safety protocols used in a variety of manufacturing environments. In addition, students will be introduced to more advanced concepts including precision measurement, Computer Numerical Control (CNC), and robotics & automation.

Courses taken in this certificate can be applied to CCV's STEM Studies (A.S.) degree program and students will be prepared to earn the nationally recognized Certified Production Technician (CPT) certification.

Required Courses are listed in the order in which we recommend you take them.

- INT 1050 - Dimensions of Self & Society
- MAT XXXX - Any college level MAT course above MAT 1020
- MEC 1030 - Introduction to Sketching, Blueprint Reading, and GD&T
- MEC 1310 - Principles of Manufacturing
- MEC 1320 - Manufacturing Technology
- MEC 1330 - Fundamentals of Engineering and Design
- MEC 2210 - Fundamentals of CNC Operation
- MEC 2220 - Parametric Solid Modeling
- MEC 2230 - Intro to Robotics and Automation
- MEC 2350 - Green Production (1 credit, optional)

Total credits: 27-28

+ This program can be completed fully online.