

COMPUTERIZED NUMERICAL CONTROL (CNC) OPERATOR - CERTIFICATE OF ACHIEVEMENT

This certificate is designed to prepare students for entry-level employment in Computer Aided Manufacturing (CAM) programming, set up, and operation of Computer Numerical Control (CNC) machine tools.

Code	Title	Units
Required Courses:		
MACH 021	Machine Shop	3
MACH 070	Computer Numerical Control Programming (CNC)	3
MACH 075	Computer Aided Design/Computer Aided Manufacturing Software	3
TECALC 087	Technical Calculations	4
MACH 090	Mechanical Print Reading	3
MACH 129	Manufacturing Processes	2
Total Units		18

Code	Title	Units
Recommended Courses:		
WELD 012	Oxy-Fuel Welding	2
OSHA 035	Federal OSHA Outreach: General Industry Safety	2
MACH 098	Machinist Technology Work Experience	1-4

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

This is a Gainful Employment Program

Program Learning Outcomes

At the completion of this program, students will be able to:

- Categorize cutting tool geometry and cutting tool materials used in CNC machining.
- Reproduce toolpath processes used in 2D and 3D High Speed CNC machining operations.
- Implement acceptable procedures employed in CNC job planning, tooling, selection, and programming.
- Predict the appropriate CAM toolpath operations used in CNC machining.