

CNC OPERATIONS AND PROGRAMMING PREPARATION CERTIFICATE

10 Semester Credit Hours; Curriculum: 0279

This CNC certificate prepares students for modern manufacturing production jobs in CNC operation, setup, and G-code programming.

Code	Title	Hours
Courses for a Certificate		
MFG 142	CNC Setup and Operations	2
MFG 144	Introduction to CNC Programming	4
MFG 145	Advanced CNC Programming	4
Total Hours		10

Program Learning Outcomes

1. Define the basic functions and control panel operations of a CNC machine.
2. Select and fasten a raw stock blank in a CNC lathe and mill for machining.
3. Identify and set up tooling to cut parts to meet a manufacturing part specification.
4. Summarize the principles of CNC setup, operation, and programming.

CNC Operations and Programming Preparation Certificate Pathway

The following Pathway is recommended for students pursuing the CNC Operations and Programming Preparation Certificate.

Course	Title	Hours
First Year		
Fall Semester		
MFG 142	CNC Setup and Operations	2
MFG 144	Introduction to CNC Programming	4
	Hours	6
Spring Semester		
MFG 145	Advanced CNC Programming	4
	Hours	4
	Total Hours	10

Note: Pathway is a recommended sequence of courses. Students should contact the department chair or program coordinator with questions about course prerequisites and recommendations.