

# ADVANCED MANUFACTURING (CNC)-OPERATION TECHNICIAN (CERTIFICATE)

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**Catalog Effective Term:** Fall 2024

**Program Code:** CTMTOT

**Credential:** Certificate

In this program, students learn to setup and operate CNC machine tools with an introduction to programming. They learn how to use basic measurement tools and read blueprints. This certificate will highlight the fundamentals of manufacturing and measurement. Students completing this certificate will be able to safely perform basic skills within a manufacturing facility, including basic part manufacturing as well as the setup and operation of CNC machine tools to manufacture basic parts. Students will also be able to perform basic inspections using appropriate measurement tools.

Students with technology interests who enjoy working with their hands like gaming, manipulating code, robotics, 3D printing are suited for this line of work.

## Minimum Credits Required for the Program: 18

Code	Title	Credits
<b>Major/Area Requirements</b>		
MEC 100	Materials and Processes	3
MEC 101	Blueprint Reading for Manufacturing	2
NCT 100	Foundation Concepts for Manufacturing (CNC)	3
NCT 101	Introduction to Computerized Machining (CNC) - I	2
NCT 110	Introduction to Computerized Machining (CNC) - II	2
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
NCT 121	Manual Programming and NC Tool Operation	4
<b>Total Credits</b>		<b>18</b>