

# ADVANCED MANUFACTURING (CNC)-PROGRAMMING AND SETUP TECHNICIAN (CERTIFICATE)

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**Catalog Effective Term:** Fall 2024

**Program Code:** CTMTPS

**Credential:** Certificate

In this program, students will learn to write, read, and edit programs for CNC machine tools. They will understand core canned cycles for milling and turning operations on CNC machine tools and have the skills to do 2D and 3D modeling and posting of CNC code using CAD/CAM software. Students will obtain a broader knowledge of equipment, geometric dimensioning and tolerancing skills to succeed in the manufacturing environment. Students completing this certificate will be able to create, edit, and debug code for local manufacturing companies.

## Program Admission Requirements

- Completion of Advanced Manufacturing (CNC) - Operation Technician certificate.
- An Academic Math Level of 4 is required to enroll in NCT 221 Advanced Manual Programming and NC Tool Operation.

**Minimum Credits Required for the Program: 19**

Code	Title	Credits
<b>Major/Area Requirements</b>		
ELE 111	Electrical Fundamentals	4
MEC 201	Mechanisms and Introduction to Mechatronics	2
NCT 123	2D CAD CAM CNC Programming for Mills and Lathes	2
NCT 201	Geometric Dimensioning and Tolerancing (GD&T)	2
NCT 221	Advanced Manual Programming and NC Tool Operation	4
NCT 244	Advanced Manufacturing Capstone (CNC)	3
WAF 103	Introduction to Gas Tungsten Arc Welding	2
<b>Total Credits</b>		<b>19</b>