

HONEYWELL CNC MACHINIST, CERTIFICATE (645)

About Our Program

CNC Machinist certificate graduates enter industry with a basic skill set that will enable them to go beyond operating machine tools and basic CNC machines. They will have the ability to set up and tool machines as well as troubleshoot programming issues. Students also gain knowledge of basic machining and manufacturing processes.

This certificate includes an internship where students develop skills while applying knowledge gained through the program.

Nature of Work and Employment

Graduates will be fluent in CNC machine setup and will be prepared for employment in manufacturing facilities utilizing CNC machining or CAD-related work.

Special Considerations

This program is designed to meet the needs of people who are already employed and who may not be able to take a full course load. Students earn between two and six credit hours each semester. This program leads to possible acceptance into the Honeywell CNC Apprenticeship program.

Requirements

First Semester		Hours
Fall:		
DRAF 110	Print Reading and Inspection	2
MTEC 101	Int Geometric Dimen/Tolerance (offered every other Fall)	1
Hours		3
Second Semester		
Spring:		
MTEC 151	Introduction to CNC Machining ¹	3
Hours		3
Third Semester		
Fall:		
MTEC 270	CNC Mill I ¹	3
Hours		3
Fourth Semester		
Spring:		
MATH 111	Technical Math ¹	3
Hours		3
Fifth Semester		
Fall:		

MTEC 280	CNC Lathe I ¹	3
OCED 290	Work Place Experience ¹	2
Hours		5
Sixth Semester		
Spring:		
DRAF 106	Drafting Fundamentals I (Inventor 3D CAD) ¹	3
OCED 290	Work Place Experience ¹	2
Hours		5
Seventh Semester		
Fall:		
MTEC 285	Advanced CNC Machining (CAM) ¹	3
BUSN 141	Business Communications ¹	3
Hours		6
Eighth Semester		
Spring:		
MTEC 164	Manufacturing Processes	3
OCED 290	Work Place Experience ¹	2
Hours		5
Total Hours		33

¹ Course has a prerequisite. See course description.

Program Outcomes

Students who complete this program of study will be able to:

- Interpret and utilize technical drawings as they apply to both manufacturing and quality control
- Identify the processes required to manufacture a component
- Use calipers, micrometers, and other basic inspection gauges to measure, inspect, and document features on a manufactured component
- Apply industry-related mathematics
- Program, set up, operate, and troubleshoot CNC machine tools utilizing G-code programming
- Use CAD/CAM software to generate a part model and a G-code program tool path
- Create technical drawings with proper views, dimensions, tolerances, and specifications

Program Contacts

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Matt Magee, Dean of Agriculture, Business & Technology
- Aaron Sargent, Industrial Technology Faculty
- Vicki Schulz, Student Advisor/Transfer Coordinator