



APPRENTICESHIP PROGRAM

Advanced Manufacturing Design Technology / CNC Operator - Milling and Turning

PROGRAM OUTCOMES:

Plan a machine procedure, program parts, and set up and operate CNC-operated equipment according to prints. Utilize computer-aided design/computer-aided machining (CAD/CAM) software to produce a part with multi-axis machining procedures.

PROGRAM LENGTH:

Years: 1

Diploma hours: 720

AAS hours: 720

A probationary period of 90 days

RELATED TECHNICAL INSTRUCTION (RTI):

Certificate(s), Diploma, AAS Degree

ON-THE-JOB TRAINING (OJT) COMPETENCIES:

- Use control mechanisms or direct physical activity to operate machines or processes.
- Inspect equipment, structures, or materials to identify errors, other problems, or defects.
- Observe, receive, and obtain information to determine whether events or processes comply with laws, regulations, or standards.
- Handling, installing, positioning, moving materials, and manipulating things.



JOB FUNCTIONS:

- Adjust machine controls and change tool settings to keep dimensions within specified tolerances.
- Replace worn tools and sharpen dull cutting tools and dies.
- Inspect sample workpieces to verify conformance with specifications using instruments such as gauges, micrometers, and dial indicators.
- Start lathe or turning machines and observe operations to ensure that specifications are positioned and secure.
- Align cutting tools in machine tool holders using hand tools and verify their positions with measuring instruments.

SKILLS:

Quality Control Analysis, Problem-solving, Detail Oriented, Creativity, Mathematics, Adaptability, Safety, Industrial control software

