

WHAT ARE MANUFACTURING TRADES?

Advanced manufacturing can be described as ‘hands-on, high-tech.’ The cover image of this book shows a CNC Operator’s hands on a control panel. Other computer-based careers that typically require a combination of apprenticeships, certifications and experience include, but are not limited to:

- CAD/CAM Programmers
- Mechatronic Technicians
- Electro-Mechanical Technicians

Hands-On Trades are versatile, offering many career options, including:

- Tool & Die Makers typically work with CNC machines and operators.
- Welders are in high demand in many industries, including manufacturing.
- Pipefitters, Heating, Ventilation & Air Conditioning, Electricians and Sheet Metal specialists can transfer skills from construction to manufacturing.
- Automotive Technicians have skills relevant to aerospace manufacturing.
- Machine Operators, Industrial Manufacturing Technicians and Industrial Maintenance Technicians can apply precision skills in many settings.

Manufacturing is a closely regulated industry and must continuously produce quality products in volumes that meet customer expectations. Opportunities exist for manufacturing workers to specialize in internal controls, including:

- Quality Inspection
- Supply Chain Technicians
- Safety Standards and Practices
- Lean Manufacturing Technicians

Some of these jobs prefer a two-year degree; this book encourages students, parents, guidance counselors, teachers and experienced workers to carefully consider careers in manufacturing that includes life-long learning. Many educational programs enable workers to acquire credentials and college credits as they progress in their careers. It is not an either-or choice.