

# Aviation Mechanical Assembly Technician

## Introduction to Aviation

- Aviation History
- Aircraft Assemblies & Configuration
- Aircraft Flight & Control
- Aircraft Construction & Materials
- Corrosion
- Federal Aviation Regulations & Documentation
- Production Order & Installation Plan
- Engineering Processes & Information Sharing

## Blueprint Reading

- Introduction to Blueprints
- Blueprint Terminology
- Blueprint Views, Lines, & Symbols
- Dimensions and Tolerance

## Precision Instruments

- Basic Concepts and Terminology for Precision Instruments
- Precision Rules
- Calipers
- Micrometers
- Gauges

## Power Island & Hand Tools

- Introduction to Power Island
- Power Island Equipment (Disc/Belt Sander, Drill Press, & Band Saw)
- Torque Tools
- Drills

## Fasteners & Installation Inspection

- Nutplates
- Rivets
- Bolts
- Temporary Fasteners (Clecros, Clamps)

- Hi-Lok Fasteners
- Lockbolt Fasteners
- Lockwire
- Installation Inspection

### Drilling & Riveting

- Marking Fastener Location
- Drilling
- Deburring
- Driving Protruding Head Rivets
- Countersinking
- Squeeze Riveting
- Drilling Composite & Titanium Material

### Sealing Application & Safety

- Sealing Principles & Functions
- Chemical Hazards & PPE
- Surface Preparation
- Sealant Types
- Sealant Application

### Electrical Bonding & Grounding

- Airplane Electricity
- Measurements and Unit Conversion
- Resistance Test Equipment Inspection
- Multimeters & Ohmmeters