To begin your training program or for more information, call (808) 539-3794 or email info@innovatehawaii.org

LEARNING PLANS FOR MANUFACTURING JOB ROLES
Online Training from INNOVATE Hawaii and Tooling U-SME offers a quick-start, progressive road map that allows manufacturers to build career paths for employees. This online training is intended to enhance your existing on the job training, to create a job progression plan and requires minimal preparation. It is efficient, effective training that has been developed with input from manufacturing experts.

FLEXIBLE AND CONVENIENT
Online classes are self-paced, typically taking 60 minutes to complete. They are easily and conveniently accessible on desktops and laptops, and on tablets and phones with the Tooling U-SME app.

CAREER PATHWAYS FOR MECHATRONICS JOB ROLES
Combine job roles for learning pathways, or offer single job roles for targeted learning. Large comprehensive programs also available.

Online Training offers:
- Content developed by industry experts
- Accessible anytime, anywhere
- Self-paced
- Predefined curriculum for each job role
- Engaging and interactive content
- Pre- and post-training knowledge assessments
- Access to Tooling U-SME’s Learning Management System (LMS)
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience

MECHATRONICS FUNDAMENTALS

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Choose a starting point based on employee’s experience or company goals for a quick-start training solution.

MECHATRONICS FUNDAMENTALS

Electrical Units
Safety for Electrical Work
Basic Measurement
Basics of Tolerance
Blueprint Reading
Calibration Fundamentals
Hole Standards and Inspection

Thread Standards and Inspection
5S Overview
Lean Manufacturing Overview
Ferrous Metals
Introduction to Mechanical Properties
Introduction to Metals

Introduction to Physical Properties
Forces of Machines
Introduction to Mechanical Systems
Safety for Mechanical Work
Approaches to Maintenance
ISO 9001 Review

Bloodborne Pathogens
Confined Spaces
Fire Safety and Prevention
Flammable/Combustible Liquids
Hand and Power Tool Safety
Info to OSHA
Lockout/Tagout Procedures

Noise Reduction and Hearing Conservation
Personal Protective Equipment
Powered Industrial Truck Safety
Respiratory Safety
Safety for Lifting Devices

SDS and Hazard Communication
Walking and Working Surfaces
Math Fundamentals
Math: Fractions and Decimals
Units of Measurement

ELECTRICAL TECHNICIAN

Introduction to Fluid Conductors
Introduction to Hydraulic Components
Introduction to Pneumatic Components
The Forces of Fluid Power
Bearing Applications

DC Motor Applications
Soft Starters
AC Controller Applications
DC Motor Applications
AC Controller Applications

Hardware for PLCs
Introduction to PLCs
Networking for PLCs
Programming

AC Motor Applications
Distribution Systems
Limit Switches and Proximity Sensors
Logic and Line Diagrams

Tools for Threaded Fasteners
Understanding Torque
Fittings for Fluid Systems

Safety for Hydraulics and Pneumatics
The Forces of Fluid Power
Troubleshooting
Essentials of Heat Treatment of Steel
Lubricant Fundamentals

Gear Applications
Lubricant Fundamentals
Mechanical Power Variables
Spring Applications
AC Motor Applications

DC Motor Applications
Distribution Systems
Introduction to Electric Motors
Logic and Line Diagrams

Reduced Voltage Starting
Reversing Motor Circuits
Solenoids
Specs for Servomotors

Symbols and Diagrams for Motors

End Effectors
Robot Axes
Robot Components
Robot Installations
Robot Maintenance
Robot Safety
Robot Sensors
Robot Troubleshooting
Vision Systems

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FLUID SYSTEMS TECHNICIAN

Control Panel Functions for the CNC Lathe
Introduction to CNC Machines
AC Fundamentals
AC Power Sources
Conductor Selection
DC Circuit Components
DC Power Sources
Electrical Instruments

Electrical Print Reading
Introduction to Circuits
Introduction to Magnetism
NEC(R) Overview
Actuator Applications
Contamination and Filter Selection
Hydraulic Control Valves
Hydraulic Fluid Selection

Hydraulic Power Sources
Hydraulic Power Variables
Hydraulic Principles and System Design
Hydraulic Schematics and Basic Circuit Design
Pneumatic Control Valves
Pneumatic Power Sources

Pneumatic Schematics and Basic Circuit Design
Benchmark and Layout Operations
Control Devices
Distribution Systems
Limit Switches and Proximity Sensors

Reversing Motor Circuits
Solenoids
Specs for Servomotors

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