ELECTRO-MECHANICAL SUPPLY CHAIN TECHNICIAN
WORK PROCESSES & SKILLS

The term of the apprenticeship will be based on the apprentice's completion and on-the-job demonstration of the professional competencies outlined in the work processes. Apprentices must demonstrate competency in a minimum of **87.5%** of the listed competencies prior to completing the program. If training employers identify specific competencies that cannot be tested on the job, the apprenticeship committee will approve and provide instruction and testing that ensures the competencies have been met. Registered Apprentices will perform work and are required to demonstrate competencies in the following skills:

Work Processes & Skills

- Implement & Remove Safety Protocols
- Establish baseline of normal operating parameters
- Maintain, troubleshoot and repair programmable logic controllers (PLCs)
- Troubleshoot and Repair of machine / mechanical system / electrical system failure
- Maintaining parts and components inventory
- Maintaining and repairing computer networks
- Install, Customize, or Upgrade Equipment
- Perform Maintenance Program Continuous Improvement
- Install Programmable Logic Controllers
- Install/ Test/ Maintain Real-Time Embedded Microprocessor-Based Data Acquisition and Control Systems
- Perform Equipment Network System Operations, Monitoring and Maintenance (from machine interface up to IDF)
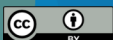
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WORK PROCESSES & SKILLS

Apprentices must Complete Coursework Aligned with Manufacturing and/or Machining Technology, Production Technician, and/or Engineering Technology pathways. Through consultation with the Apprenticeship Committee, the Local Education Agency, and the indenturing employer, apprentices will select an applicable program of study/course track and complete a minimum of **144 hours** of related instruction per year of apprenticeship. Prior applicable education and training will be credited towards completion of related education requirements, and apprentices will be offered tracks advancing their technical aptitude in the profession.

Related Instruction Content May Include

INTRODUCTION TO AUTOMATED WAREHOUSING	96 HOURS
BLUEPRINT READING	54 HOURS
TECHNICAL COMMUNICATIONS	54 HOURS
OSHA STANDARDS FOR GENERAL INDUSTRY	36 HOURS
ELECTRIC MOTORS FOR ELECTRICIANS	108 HOURS
MATH FOR ENGINEERING TECHNOLOGY	54 HOURS
MICROPROCESSORS AND MICROCONTROLLERS	108 HOURS
HYDRAULIC AND PNEUMATIC SYSTEMS	112 HOURS
INDUSTRIAL ELECTRICAL AUTOMATION	108 HOURS
PROGRAMMABLE LOGIC CONTROLLERS	90 HOURS
COOPERATIVE WORK EXPERIENCE (1-16 UNITS)	

REGISTERED WITH:

DIVISION OF APPRENTICESHIP STANDARDS
DAS
STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS

DEPARTMENT OF LABOR
UNITED STATES OF AMERICA