

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)







APPRENTICESHIP PROGRAM OUTLINE

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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	_
INTRODUCATION 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:





Electro-Mechanical Supply Chain Technician Apprenticeship Program Outline by LAUNCH Apprenticeship Network, Department of Labor (DOL) - Apprenticeship Building America (ABA)
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This workforce product was funded by a \$4,697,637 grant awarded to Riverside Community College District by the U.S. Department of Labor (DOL) – Apprenticeship Building America (ABA) Grant. The total cost of the product is financed with 100% Federal funds. The product was created by the recipient and does not necessarily reflect the official position of DOL-ETA. DOL-ETA makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it.