

Stanislaus County Area

Manufacturing & Maintenance

Joint Apprenticeship Program

Electro Mechanical Technician

The Electro - Mechanical Technician Apprenticeship Program is designed for individuals hired as apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of 624 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

Packaging Technician

Work Process

Hours

Observe and become qualified to use hand tools, soldering equipment, operate a forklift & aerial	400
Observe and become qualified to use and interpret electrical test equipment, verify operation of an calibrate instrumentation	400
Reads schematics, PI & D diagrams and operating instructions	400
Perform general layout and fabrication for basic electrical systems and controls, including the running of wire and interface with wireless systems	700
Install PLC components, input and verify PLC code to meet operational requirements	400
Analyze and determine electrical power requirements for equipment and/ or services	400
Install, test and repair electrical/ Mechanical systems on industrial equipment including HVAC, lighting systems, hydraulic and or pneumatic systems, refrigeration, fire and security alarm systems	400
Conduct maintenance and repair of AC and DC motors	400
Perform both preventative maintenance and repair for mechanical systems and equipment including conveyors, gearboxes, variable frequency drive systems, including proper lubrication	400
Read and interpret blueprints and operating instructions for mechanical parts and equipment	400
Properly use welding and metal fabrication and sheet metal equipment	400
Fabricate and install sheet-metal enclosures and steel structures	400
Utilize machine shop equipment to perform maintenance repairs or fabricate replacement parts	400
Create work orders and order materials, supplies, parts and equipment	400
Track and report maintenance and up-grading costs	400
Participate in and/ or conduct root-cause analysis including preparation of final report	400
Participate in and/ or conduct a Gemba with ability to collect and summarize observed data into a "goal directed report"	400
Total Hours	8,000

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