

# **CAREER PATHWAY**

The Industrial Electrical & Mechanical Accelerated Pathway is designed to meet the industry demand for entry-level and incumbent workers entering or working in manufacturing, distribution and other industries using advanced technology in plant operations.

Trainees will receive Cal OSHA 10 and nationally recognized certifications, as well as instruction in industrial electrical and mechanical trades, industry process math, blueprint reading, troubleshooting industrial controls, Ohm's law, motor controls, PLCs and oxyfuel cutting. For a list of the full curriculum modules, please review the back of this page.

**APPRENTICESHIP:** This program is approved by the California Division of Apprenticeship Standards for period one of the occupation of Industrial Maintenance Electrician.

**PAID INTERNSHIPS:** Dependent on grant funds and employer participation, trainees may qualify to participate in a 400-hour paid internship at \$15.00 an hour at the completion of training.

**NEXT TRAINING PROGRAM: APRIL 9, 2018 - JULY 25, 2018** 

**Annual Job Openings** in the Inland Empire:

\$16.49-\$45.18

Entry to Experienced Hourly Wage Range

After successful training completion, trainees will work with InTech Career Center to consider careers with employer partners who may have open job opportunities.

**SESSION TO FIND OUT MORE:** 

www.intechcenter.org (909) 652-8488

## INDUSTRIAL ELECTRICAL & MECHANICAL ACCELERATED PATHWAY CURRICULUM

Trainees are exposed to a variety of topics designed to prepare them for entry-level positions in advanced manufacturing. Training is offered in full-time and part-time programs. Most trainees will receive instruction in the following topics:

### PRE-APPRENTICESHIP

#### **Craft Fundamentals & Cal OSHA 10**

Basic Safety with Cal OSHA 10

Introduction to Hand Tools

Introduction to Construction Math

Introduction to Power Tools

Construction Drawings

Basic Rigging

Introduction to Materials Handling

Craft-Related Mathematics

## Fundamentals of Industrial Electrical and Mechanical Trades

Fasteners and Anchors

Gaskets and Packing

Pumps and Drivers

Valves

Introduction to Test Instruments

Lubrication

Mobile & Support Equipment

Introduction to Electricity & Ohm's Law

## **Introduction to Welding**

Oxyfuel Cutting

## APPRENTICESHIP PERIOD ONE

#### **Introduction to Industrial Electrical**

Industrial Safety for E&I Technicians

Introduction to the National Electrical Codes

**Process Mathematics** 

**E&I** Test Equipment

Introduction to Electrical Troubleshooting

Electrical Theory

Alternating Current

Electrical Blueprints & Drawings

Motors & Controls

Flow, Pressure, Level & Temperature

NFPA 70E Arc Flash Safety

NFPA 70B Electrical Equipment Maintenance

Conductors and Cables

Conductor Terminations and Splices

Instrumentation & Process Controls I

Basic PLCs

**CERTIFICATION:** Industrial Electrical & Mechanical trainees who successfully complete these topics will receive their **Cal OSHA 10 Certification** and the following NCCER Industrial Maintenance Electrical & Instrumentation Certifications: **Core & Level 1.** Trainees will also have the opportunity to receive Level 2 certification.

## For more information, contact the InTech Center:

Chaffey College

(909) 652-8488 | www.intechcenter.org