

ELECTRICIAN APPRENTICESHIP TECHNOLOGIES, ASSOCIATE OF APPLIED SCIENCE

Program Description

Oregon Bureau of Labor and Industries – Apprenticeship Training Division (BOLI-ATD) and local Joint Apprenticeship Training Committee (JATC) trade-specific standards of apprenticeship control the training. This program is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is an earn-while-you-learn program. The apprentice is an employee and earns a wage while receiving on-the-job training and attending related training classes. An approved training agent selects apprentices through a competitive bid process from current employees. The apprentice connects to the JATC after selection through the indenture (registration) process. Local JATCs representing labor and management work with the College to implement the apprenticeship programs. Every six months the JATC reviews and evaluates each apprentice's progress.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Operations Management at Oregon Institute of Technology.

The BOLI-ATD website oregon.gov/boli/atd/ (<http://oregon.gov/boli/atd/>) provides more information about apprenticeship and statewide opportunities.

Umpqua Community College offers one 8,000-hour BOLI-ATD registered apprenticeships in partnership with Roseburg Industrial Electrical JATC, and BOLI-ATD.

- Manufacturing Plant Electrician

Program Outcomes

This apprenticeship program provides specialized training for apprentices who are registered with BOLI-ATD as Manufacturing Plant Electrician. The Oregon State Standard for the MPE trade aligns with this course of study.

All required courses must be completed with at least a "C" grade. Successful apprentice students earn a trade-specific Oregon State License Journeyman Card upon successful completion of the Building Codes Division limited maintenance electrician journeyman test.

Students who successfully complete the Electrician program will:

1. Assess and troubleshoot various electrical situations
2. Demonstrate accurate measurements, calculations and use of equipment
3. Demonstrate knowledge of electrical fundamentals and safety
4. Complete Electrical Code and Exam Prep.

5. Earn a trade-specific Oregon State License Journeyman Card upon successful completion of the Building Codes Division electrical journeyman test

Career Considerations

The Electrical Apprenticeship Technology program prepares students for advanced-level jobs and journeyman careers in the following areas:

- Licensed Manufacturing Plant Electrician

Electrical Apprenticeship Technology graduate may continue education at Oregon Institute of Technology for obtaining an Operations Management Bachelor of Science degree or Technology & Management Bachelor of Applied Science.

Program Course Requirements

First Year		Credits
First Term		
APR 151	Basic Electronics-Electricity	4
MTH 102	Math for the Trades (or higher)	4
Credits		8
Second Term		
APR 153	Electrical Applications-Tech	3
APR 159	Electrical Blueprint Reading	2
Credits		5
Third Term		
APR 155	Electrical Best Practices	2
APR 157	Intro to National Elect Code	2
Credits		4
Second Year		
First Term		
APR 140	Beg Welding for Apprentices	1
APR 163	Commercial Wiring	3
Credits		4
Second Term		
APR 165	AC Electronics and Electricity	4
WR 115 or WR 117	Intro to Expos Writing (or higher) or Writing for Trades	4
Credits		8
Third Term		
APR 167	Electric Motors-Transformers	3
APR 169	Electrical Code Study II	2
Credits		5
Third Year		
First Term		
APR 251	Electrical Sensors and Control	3
APR 255	Motor Controls I	2
Credits		5
Second Term		
APR 253	Electrical Code Study III	2
APR 265	Motor Controls II	2
Credits		4
Third Term		
APR 259	Solid State and Digital Apps	4
COM 218Z or PSY 101	Interpersonal Communication ¹ or Psychology of Human Relations	3-4
Credits		7-8
Fourth Year		
First Term		
APR 261	Electrical Code Study IV	2
APR 263	Communications Alarm-Control	2

Elective Choice ²		3-4
Credits		7-8
Second Term		
APR 257	High Voltage Applications	2
APR 267	Advanced Code Study	3
Elective Choice ²		3-4
Credits		8-9
Third Term		
APR 269	Journeyman Exam Prep	3
INDU 293E CPL Journeyman Card ³		22
Credits		25
Total Minimum Credits		90-93

¹ Human Relations Option, any Human Relations course can be taken.

See advisor for full list of courses.

² Can take any elective course from the Approved Course Listing.

³ INDU 293E and INDU 293I are placeholders to represent the approved Credit for Prior Learning (CPL) 22 credits a student earns upon presentation of their Journeyman Card. These courses are interchangeable with each other and between the two AAS degrees (AAS-EAT and AAS-IMMT).

Advising Notes

- See advisor and program coordinator to plan your courses
- Once program is completed, students gain a state-issued Journeyman card equal to 22 credits – INDU 293E
- To obtain the full AAS degree you must have 90-108 credits, see advisor for full list of course options

Program Entrance Requirements

- JATC Approval