INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP, ASSOCIATE OF APPLIED SCIENCE

Program Description

Oregon Bureau of Labor and Industries – Apprenticeship Training Division (BOLI-ATD) and local Trade Apprenticeship Training Committee (TATC) 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 TATC after selection through the indenture (registration) process. Local TATCs representing labor and management work with the College to implement the apprenticeship programs. Every six months the TATC 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 Technology and Management at Oregon Institute of Technology.

The BOLI-ATD website oregon.gov/boli/apprenticeship/ (https://www.oregon.gov/boli/apprenticeship/pages/default.aspx) provides more information about apprenticeship and statewide opportunities.

Umpqua Community College offers three 8,000-hour BOLI-ATD registered apprenticeships in partnership with Douglas, Coos, Curry, industrial TATC and BOLI-ATD.

- Industrial Fabricator/Welder
- Industrial Maintenance Machinist
- Industrial Maintenance Millwright

Program Outcomes

This apprenticeship program provides specialized training for apprentices registered with BOLI-ATD as Industrial Fabricator/Welder, Industrial Maintenance Machinist, or Industrial Maintenance Millwright apprentices. The Oregon State Standard for each trade aligns the course of study.

Each apprentice student earns a trade-specific Oregon State Journeyman Card upon successful completion.

Students will:

1. Demonstrate knowledge of machinery operation and maintenance
2. Demonstrate fabrication techniques
3. Demonstrate mathematics of the trade
4. Demonstrate safe working practices in accordance with state and federal regulations

Career Considerations

The Industrial Maintenance program prepares students for advanced-level jobs and journeyman careers in the following areas:

- Journeyman Fabricator/Welder
- Journeyman Industrial Maintenance Machinist
- Journeyman Industrial Maintenance Millwright

Program Course Requirements

First Year		
First Term		**Credits**
APR 120	Industrial Safety	3
APR 140	Beg Welding for Apprentices	3
	Credits	**6**
Second Term		
APR 141	Int Welding for Apprentices	3
MTH 102	Math for the Trades [1]	4
	Credits	**7**
Third Term		
APR 228	Rigging Fundamentals	3
MTH 103	Advanced Math for the Trades	4
	Credits	**7**
Second Year		
First Term		
APR 131	Basic Metallurgy	3
COM 218Z or PSY 101	Interpersonal Communication or Psychology of Human Relations	3-4
	Credits	**6-7**
Second Term		
APR 145	Blueprint Reading	3
Elective (https://umpqua-public.courseleaf.com/degrees-certificates/ucc-program-advising-sheet/#Elective) [4]		3
	Credits	**6**
Third Term		
APR 130	Mech Principles-Drive Designs	3
WR 115 or WR 117	Intro to Expos Writing (or higher) or Writing for Trades	4
	Credits	**7**
Third Year		
First Term		
APR 115	Drafting and Design I	3
	Credits	**3**
Second Term		
APR 111	Machine Shop Practices I	3
Elective (https://umpqua-public.courseleaf.com/degrees-certificates/ucc-program-advising-sheet/#Elective) [4]		3
	Credits	**6**
Third Term		
APR 112	Machine Shop Practices II	3
Elective (https://umpqua-public.courseleaf.com/degrees-certificates/ucc-program-advising-sheet/#Elective) [4]		3
	Credits	**6**
Fourth Year		
First Term		
APR 121	Hydraulics I	3
APR 229 or CIS 120	Basic Pneumatics [2] or Intro to Digital Literacy	3-4
	Credits	**6-7**
Second Term		
APR 122	Hydraulics II	3

Elective (https://umpqua-public.courseleaf.com/degrees-certificates/ucc-program-advising-sheet/#Elective) [4]		2
	Credits	**5**
Third Term		
APR 113	Machine Shop Practices III [3]	3
or APR 123	or Hydraulics III	
or APR 142	or Adv Welding for Apprentices	
INDU 293I CPL Journeyman Card [5]		22
	Credits	**25**
	Total Minimum Credits	**90-92**

1 MTH 102is optional to take in preparation for the required math, MTH 103. This course is not required.

2 Choose APR 229 for the Millwright & Fab/Welders pathway. Choose CIS 120 for the machinist pathway. See an advisor to ensure you are taking the course for your chosen path.

3 Choose APR 113 for the Machinist pathway. Choose APR 123 for the Millwright pathway. Choose APR 142 for the Fabricator pathway. See an advisor to ensure you are taking the course for your chosen path.

4 Any course can be taken as an elective.

5 INDU 293I is a placeholder to represent the approved Credit for Prior Learning (CPL) 22 credits a student earns upon presentation of their Journeyman Card.

Advising Notes

- Upon completion of this program, students who receive their Journeyman card, are able to gain 22 credits, INDU 293I
- To complete the AAS students must complete 90-108 credits, by receiving the Journeymen card, the listed courses above and electives.
- See advisor for elective options.
- All courses must be passed with a grade of C or better.

Program Entrance Requirements

- TATC Approval
- CPR/First Aid certification is required for entry