

INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP, CERTIFICATE

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/atd/ (<http://oregon.gov/boli/atd/>) 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 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.

Successful completion of required courses must be with at least a "C" grade. 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

Course	Title	Credits
First Year		
First Term		
APR 120	Industrial Safety	3
APR 140	Beg Welding for Apprentices	1
Credits		4
Second Term		
APR 141	Int Welding for Apprentices	1
MTH 102	Math for the Trades ¹	4
Credits		5
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 ² or Psychology of Human Relations	3-4
Credits		6-7
Second Term		
APR 145	Blueprint Reading-Sketching	3
Credits		3
Third Term		
APR 130	Mech Principles-Drive Designs	3
WR 117	Writing for Trades (WR 115 or higher accepted)	4
Credits		7
Third Year		
First Term		
APR 115	Computer Aided Drafting I	3
CIS 120	Intro to Digital Literacy ³	4
Credits		7
Second Term		
APR 111	Machine Shop Practices I	3
Credits		3
Third Term		
APR 112	Machine Shop Practices II	3
Credits		3
Fourth Year		
First Term		
APR 121	Hydraulics I	3
APR 229	Basic Pneumatics ⁴	3
Credits		6
Second Term		
APR 122	Hydraulics II	3
Credits		3

Third Term

APR 123	Hydraulics III	3
	Credits	3
	Total Minimum Credits	57-58

¹ MTH 102 is the prerequisite for the required math, MTH 103. This course is only needed if you do not place into MTH 103.

² Human Relations requirement, you can take any approved Human Relations course, see advisor for full list of course options.

³ CIS 120 is only required for the Machinists path, see advisor to ensure you are taking the right courses for your chosen path.

⁴ APR 229 is only required for Millwrights & Fab/Welders pathway, see advisor to ensure you are taking the correct courses for your chosen path.

Program Entrance Requirements

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