



Industrial Equipment

Youth Apprenticeship

INDUSTRIAL EQUIPMENT

Industrial Equipment youth apprentices set up, operate, monitor, and control production equipment. Requirements. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One or two years

OCCUPATIONAL COMPETENCIES

Industrial Equipment youth apprentice must complete all **7** Manufacturing Fundamentals Competencies. No substitutions to this list. Students completing a one-year program must complete **13** of the 26 Industrial Equipment competencies from the list below. Second-year students will complete the remaining **13** Industrial Equipment competencies. Employers can substitute up to **1** competency per year with another occupationally appropriate skill. Substitutions should be added to the competency list for assessment. Note that where necessary, skills can be simulated.

Note: Students completing a 2-year industrial equipment youth apprenticeship must select different industrial equipment processes than the first year.

***Students who completed one year of Industrial Equipment or a previous Manufacturing YA program do *not* need to repeat the Manufacturing Fundamentals Competencies.

Manufacturing Fundamentals Competencies	Industrial Equipment Competencies
<ol style="list-style-type: none"> 1. Focus on customer needs 2. Use various instruments 3. Operate tools and equipment safely 4. Practice quality assurance principles 5. Follow personal safety requirements 6. Maintain a safe work environment 7. Demonstrate professional role to be used in an emergency 	<ol style="list-style-type: none"> 1. Read technical drawings and work orders 2. Interpret equipment symbols and procedures 3. Maintain schedules, communication, and documentation 4. Monitor equipment for correct operation 5. Identify maintenance requirements 6. Layout and plan work 7. Perform safety checks 8. Use hand tools 9. Perform preventive maintenance (PM) 10. Perform lubrication procedures 11. Support basic equipment problem identification and diagnosis 12. Assist with basic equipment repair 13. Assist re-qualifying equipment 14. Calibrate tools and equipment 15. Set up metal

	<ul style="list-style-type: none"> 16. Mount a bearing 17. Install mechanical fasteners 18. Assist with electrical circuit problem identification and diagnosis 19. Assist with motor control problem identification and diagnosis 20. Assist with hydraulic and/or pneumatic problem identification and diagnosis 21. Maintain and repair mechanical drive system components 22. Maintain and repair electrical control system components 23. Maintain and repair hydraulic system components 24. Assist installation and qualification of equipment 25. Maintain and repair pneumatic system components 26. Fabricate metal
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REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

Some of the related instruction courses can bridge into the following registered apprenticeship:

- Industrial Manufacturing Technician
- Industrial Electrician

POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. Following is partial list.

- Industrial Maintenance Mechanic Technical Diploma
- Industrial Maintenance Technician Technical Diploma
- Industrial Mechanic Technical Diploma