



WELDING

Welding youth apprentices practice welding fabrication processes in various industry environments. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One or two years

OCCUPATIONAL COMPETENCIES

Welding youth apprentices must complete a **total of 25** competencies. All **7** Manufacturing Fundamentals Competencies must be complete. No substitutions to this list. **Seventeen** of the 18 Welding competencies listed below must be complete. Employers can substitute up to **1** competency with another occupationally appropriate skill. Substitutions must be added to the competency list for assessment. Note that where necessary, skills can be simulated.

NOTE: Students completing a 2-year welding youth apprenticeship must select different welding processes than the first year.

***Students who completed a previous Manufacturing YA program do *not* need to repeat the Manufacturing Fundamentals Competencies.

Manufacturing Fundamentals Competencies	Welding 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 welding technical drawings and work orders 2. Interpret welding symbols and procedures 3. Layout and plan work 4. Perform safety checks 5. Prepare base metal 6. Set up to fabricate base metal 7. Set up welding job 8. Fabricate base metal 9. Cut metal thermally/chemically 10. Tack work pieces 11. Weld metal 12. Monitor product and process 13. Assist inspection of completed metal piece 14. Process production documents 15. Clean up 16. Monitor equipment for correct operation

	17. Perform routine preventive maintenance (PM) 18. Document equipment use, PM, and/or operational problems
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REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

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

- Welding Fabricator
- Industrial Manufacturing Technician

POST-SECONDARY PATHWAY OPPORTUNITIES

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

- Welding Technical Diploma
- Welding and Metal Fabrication Technical Diploma
- Welding Fabrication Technical Diploma