



# Electromechanical/Mechatronics

Youth Apprenticeship

## ELECTROMECHANICAL/MECHATRONICS

Electromechanical/Mechatronics youth apprentices gain skills related to operating, testing, maintaining, or adjusting unmanned, automated, servomechanical, or electromechanical equipment. Apprentices must adhere to industry safety and security standards.

**Length of Apprenticeship:** One year

## COMPETENCIES

Youth Apprentices must complete a **total of 15** competencies. **Thirteen** of the 15 competencies listed below must be complete. Employers can substitute up to **2** competencies with other occupationally appropriate skills. Substitutions must be added to the competency list for assessment. Note that where necessary, skills can be simulated.

\*\*\*Students who completed one year of Electromechanical/Mechatronics or a previous Manufacturing YA program do *not* need to repeat the Manufacturing Fundamentals Competencies.

Manufacturing Fundamentals Competencies	Electromechanical/Mechatronics Competencies
<ol style="list-style-type: none"> <li>1. Focus on customer needs</li> <li>2. Use various instruments</li> <li>3. Operate tools and equipment safely</li> <li>4. Practice quality assurance principles</li> <li>5. Follow personal safety requirements</li> <li>6. Maintain a safe work environment</li> <li>7. Demonstrate professional role to be used in an emergency</li> </ol>	<ol style="list-style-type: none"> <li>1. Use test instruments</li> <li>2. Read blueprints and schematics</li> <li>3. Install electrical and electronic parts</li> <li>4. Use hand tools</li> <li>5. Install mechanical equipment</li> <li>6. Troubleshoot electronic systems</li> <li>7. Use precision measuring instruments</li> <li>8. Procure parts</li> </ol>

## REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

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

- Mechatronics

## POST-SECONDARY PATHWAY OPPORTUNITIES

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

- Mechatronics Basics Technical Diploma
- Electromechanical Maintenance Technician Technical Diploma