

Welding Technologies 3 & 4
Scope & Sequence: Year 2

Semester 1		Semester 2	
Quarter 1	Quarter 2	Quarter 3	Quarter 4
<p>Technical Standards: 1.0, 2.0, 9.0 Professional Standards: 1.0, 4.0, 5.0, 6.0, 7.0, 8.0</p> <p><u>Unit 1</u> Blueprint Reading 2 & Tools</p> <ul style="list-style-type: none"> Type and safe use of respiratory equipment. Follow job and safety regulations. Identify basic elements of a welding drawing. Interpret welding symbols and specifications for welding procedure. Use metal break and metal roller. <p>Technical Standards: 1.0, 4.0, 5.0 Professional Standards: 4.0, 5.0, 7.0</p> <p><u>Unit 2</u> Equipment Maintenance</p> <ul style="list-style-type: none"> Management of cutting fumes and gasses. Routine maintenance of GMAW equipment. Routine maintenance of FCAW equipment. 	<p>Technical Standards: 1.0, 5.0, 9.0 Professional Standards: 1.0, 4.0 5.0, 6.0, 6.0, 7.0, 8.0</p> <p><u>Unit 3</u> FCAW Set Up</p> <ul style="list-style-type: none"> Set up and perform FCAW operations. Identify the use, handling and storage of various filler material. Explain the difference between FCAW-G and FCAW-S. <p>Technical Standards: 1.0, 2.0, 5.0, 9.0 Professional Standards: 1.0, 4.0 5.0, 6.0, 7.0, 8.0</p> <p><u>Unit 4</u> FCAW</p> <ul style="list-style-type: none"> Set up and perform FCAW operations. Fabricate a project from a print. Use a hydraulic shear. Maintenance of FCAW equipment. 	<p>Technical Standards: 1.0, 6.0 Professional Standards: 1.0, 4.0, 5.0, 6.0, 7.0, 8.0</p> <p><u>Unit 5</u> GTAW Set Up</p> <ul style="list-style-type: none"> Set up GTAW equipment. Identify use, storage and handling of various filler material. Select and use proper gases. <p>Technical Standards: 1.0, 6.0 Professional Standards: 1.0, 4.0, 5.0, 6.0, 7.0, 8.0</p> <p><u>Unit 6</u> GTAW</p> <ul style="list-style-type: none"> Set up GTAW equipment. Perform fillet welds. Weld Aluminum. Weld Stainless steels. Weld Carbon Steels. <p><i>*Technical Skills Assessment Industry Certification Testing</i></p>	<p>Technical Standards: 8.0 Professional Standards: 2.0, 4.0, 5.0, 6.0, 7.0, 8.0</p> <p><u>Unit 7</u> Weldment Testing</p> <ul style="list-style-type: none"> Describe nondestructive testing methods. Perform destructive testing methods.