

1. Title	Perform oxy-acetylene welding(OAW) / oxyfuel and arc cutting(OAC) at specified positions
2. Code	EMCUIN318A
3. Range	Perform oxy-acetylene welding(OAW) / oxyfuel and arc cutting(OAC) at specified positions in electrical and mechanical welding workshops or work sites.
4. Level	3
5. Credits	20
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Preparations for OAW</p> <ul style="list-style-type: none"> <li>◆ Understand the classification of weld joint in oxy-acetylene welding</li> <li>◆ Understand the application and adjustment of oxy-acetylene flame</li> <li>◆ Understand OAW defects such as: <ul style="list-style-type: none"> <li>• surface porosities</li> <li>• surface cracks</li> <li>• undercut, etc</li> </ul> </li> <li>◆ Understand types of steel and formulate the cutting procedures</li> <li>◆ Understand the basic working principles of oxy-acetylene brazing</li> <li>◆ know about the classification, specification and standard of oxy-acetylene brazed filler metals</li> <li>◆ Understand code of practice for OAW / OAC</li> </ul> <p>6.2 Apply OAW / OAC</p> <ul style="list-style-type: none"> <li>◆ Apply OAW/OAC techniques safely <ul style="list-style-type: none"> <li>• Perform two sides square edge butt weld at vertical-up position and at overhead position</li> <li>• Perform fillet weld at vertical-up position and at overhead position</li> <li>• Perform plate cutting by hand-held cutting torch at overhead position</li> </ul> </li> </ul> <p>6.3 Professionalism in OAW</p> <ul style="list-style-type: none"> <li>◆ Capable to perform OAW tasks according to relevant guidelines and code of practice</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to complete OAW / OAC tasks at specified positions by different jointing methods, without causing obvious surface weld defects; and</p> <p>(ii) Capable to perform OAW / OAC tasks safely.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses the competency of EMCUIN226A ‘Basic oxy-acetylene welding(OAW) / oxyfuel and arc cutting(OAC)’