1. Title	Basic oxy-acetylene welding(OAW) / oxyfuel and arc cutting(OAC)	
2. Code	EMCUIN226A	
3. Range	Perform OAW / OAC tasks for electrical and mechanical works at electrical and mechanical welding workshops or work sites.	
4. Level	2	
5. Credit	5	
6. Competency		Performance Requirements
	6.1 Code of practice and preparations for OAW / OAC	♦ Understand relevant code of practice and safety regulation for OAW / OAC, including: • Operating OAW / OAC equipment and accessories, including handling of gasesous cylinder, correctly and safely • Wearing proper personal protective gear • Protecting against fire and explosion • Protecting against harmful arc ray effectively • Protecting against harmful gases and poisonous fumes • Following the legislations and safety guidelines on OAW / OAC ♦ Know about the preparations for OAW / OAC: • Understand the general application and their limitations of OAW / OAC • Understand functions of various OAW / OAC equipment, including high pressure gasesous cylinder, pressure regulator, flashback arrestor, welding torch and cutting torch , etc. • Identify the requirements of welding materials for oxyacetylene welding and cutting such welding rods, welding flux, etc ♦ Perform quality inspection on weld profile • Identify various types of common and simple surface weld defects at welded joints, such as undercut, overlap and porosities • Avoid causing the simple surface weld defects mentioned above
	6.2 Methods and procedures for operating OAW / OAC	♦ Apply OAW / OAC techniques • Select proper parameters for welding, such as gas flowrate and pressure, angle of welding and cutting torch, welding or cutting speed, etc. • Perform following tasks: ‣ Perform linear surface buildup at flat position ‣ Perform plate cutting at flat position

		‣ Perform two sides square edge butt weld at flat position and horizontal position ‣ Perform fillet weld at flat position and horizontal position ‣ Perform plate cutting at horizontal position and vertical position
	6.3 Professionalism in OAW / OAC	♦ Perform OAW / OAC tasks according to relevant safety guidelines and code of practice
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to complete basic OAW / OAC tasks without causing obvious surface weld defects; and (ii) Capable to perform OAW / OAC tasks safely.	
8. Remarks	This unit of competency is applicable to general electrical and mechanical welding practitioners.	