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| Title | **Perform welding at introductory level** |
| Level | **2** | **Credits** | **12** |

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| Purpose | This competency standard is intended for those who carry out a range of welding operations at introductory level in a variety of contexts. People holding credit for this competency standard are able to: Plan and prepare for welding; demonstrate safe welding practice; and complete work. |

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| Classification ISCED | 0713 Electricity and energy |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **D1:** **Plan and prepare for welding**  | **Trainee will be able to:****P1-** Identify worksite for potential hazards**P2-** Select and use personal protective equipment**P3-** Identify appropriate welding method to be applied in line with job requirements**P4-** identify and select welding tools and equipment | **K1-** Safety requirements; Specifications; Hazard identification**K2-** Personal protective equipment (PPE)**K3-** Different welding methods, application, and procedures**K4-** Weldingtools and equipment, and calibration thereof |
| **D2:** **Demonstrate safe welding practice** | **Trainee will be able to:****P1-** Welding operations comply with safe working practice**P2-** Check and prepare welding equipment and materials**P3-** Prepare and join metals**P4-** Check for defects and welding faults**P5-** Carry out corrective measures | **K1-** Source and nature of hazards associated with welding:- electric shock, burns (arc radiation, heat), fumes, noise, hard and/or hot particles, chemical (cleaning, pickling), dust**K2-** Welding equipment may include, but is not limited to:**-**connections, hose, regulator, torch, cables, gas cylinder, cable insulation, condition of welding torches and/or guns, condition of material and filler metals**K3-** Factors affecting weld quality**K4-** Identification of defective welds |
| **D3:****Complete work** | **Trainee will be able to:****P1-** Complete work related documents and procedures**P2-** Perform final quality inspection**P3-** Clean up and store tools, equipment and materials | **K1-** Importance of documentation**K2-** Importance of quality assurance and control**K3-** Waste disposal procedures; Care of tools and equipment |