



Australian Government

Assessment Requirements for UEEEC0011

Design and develop electronics/computer systems projects

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - implementing workplace procedures and practices
 - using risk control measures
- constructing and testing prototype hardware and/or software according to design brief and regulatory requirements
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- developing outlines/plans of alternative designs
- developing the design within the safety and functional requirements and budget limitations/constraints
- documenting and presenting design effectively
- obtaining final design approval
- successfully negotiating design alteration requests
- verifying compliance of the design against the final brief
- identifying and preparing to design and develop electronic/computer system in accordance with design brief.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- connection of test/measuring devices into a circuit
- design objectives (specifications) to satisfy a customer attribute/brief
- design plan and solution synthesis (by selecting or creating the solution)
- electronic measuring instruments
- engineering design process

- functional and non-functional requirements of a customer project
- relevant job safety assessments or risk mitigation processes, including:
 - risks and control measures associated with low voltage (LV) machines
- relevant industry standards, regulations, codes of practice and WHS/OHS legislated requirements
- relevant manufacturer specifications
- relevant workplace documentation
- relevant workplace policies and procedures
- validations of the resulting design against the customer's needs.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to designing and developing electronics/computer systems projects
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>