Australian Government

Assessment Requirements for UEECD0005 Apply physics to solving electrotechnology engineering problems

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 and performance criteria on at least two separate occasions and include:

- applying measured values to developing solutions to static and dynamic problems
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including
  - using risk control measures
- applying the laws of physics to developing solutions to electrotechnology problems
- dealing with unplanned events in accordance with problem-solving techniques and workplace procedures
- developing resolutions in static and dynamics problems
- identifying the scope of electrotechnology problems
- obtaining and using equipment and testing devices for problem solving
- reporting adverse effects in the developed solutions
- reporting developed solutions and justification.

Knowledge Evidence

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

- problem-solving techniques
- relevant adverse effects and outcomes of solution
- relevant equipment and testing devices
- relevant industry standards
- relevant manufacturer specifications and operating instructions
- relevant measurement values
- relevant physics theorems
- relevant job safety assessments or risk mitigation processes
- relevant tests and measurements
- relevant WHS/OHS legislated requirements
- relevant workplace documentation, including:

  - diagrammatic form
  - solution report
- relevant workplace instructions, policies and procedures.

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 simulated suitable 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 physics and how they apply to solving electrotechnology-related problems
- 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