Australian Government

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.

Application

This unit involves the skills and knowledge required to apply physics to solving electrotechnology engineering problems.

It includes identifying and solving physics-related problems and documenting justifications. It also includes applying knowledge of measurement techniques.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Cross Discipline

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Identify electrotechnology-related problems	**1.1** Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied
	1.2 WHS/OHS risk control work preparation measures and workplace procedures are followed

	1.3	Scope of electrotechnology problem is identified from documentation and/or work supervisor
	1.4	Problems are stated in writing and/or diagrammatic form to ensure appropriate methods are used to resolve them
	1.5	Equipment and testing devices required for problem solving are obtained and checked for correct operation and safety
2 Apply physics to developing solutions	**2.1**	WHS/OHS risk control work measures and workplace procedures are followed
	2.2	Tests and measurements are undertaken in accordance with WHS/OHS requirements and workplace procedures
	2.3	Tests, measurements and results are used to develop resolutions in static and dynamic problems
	2.4	Theoretical and measured values are applied to develop solutions to static and dynamics problems
	2.5	Results are applied to develop solutions to problems
	2.6	Unplanned situations are dealt with in accordance with WHS/OHS requirements and approval of relevant person/s
3 Report solution	**3.1**	Proposed solutions to electrotechnology problems are documented with justification for the solutions
	3.2	Adverse effects and outcomes of developed solution are reported
	3.3	Solution report is forwarded to relevant person/s in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package

Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEE082A Apply physics to solving electrotechnology engineering problems.

Links

Companion Volume implementation guides are found in VETNet - - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6