



**Australian Government**

# **UEECD0041 Solve electrotechnical engineering problems**

**Release: 1**

# UEECD0041 Solve electrotechnical engineering problems

## 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 solve electrotechnical engineering problems.

It includes working safely, applying problem-solving techniques, using a range of mathematical processes and techniques to provide solutions to electrotechnical problems, and documenting solutions.

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

Elements describe the essential outcomes.

**1 Provide calculated solutions to electrotechnical engineering problems**

### PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are obtained and applied
- 1.2** Scope of the problems are obtained from documentation and/or from work supervisor to determine work to be
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undertaken

- 1.3 Problems are stated in writing and/or diagrammatic form to ensure they are identified, and relevant methods used to resolve them
  - 1.4 Constants and variables related to the problem are obtained from measured values and/or problem documentation
  - 1.5 Alternative methods for resolving the problem are considered and, as required, discussed with relevant person/s
  - 1.6 Problems are solved using relevant mathematical processes and techniques within relevant industry standards
- 2 Complete work and document calculated solutions to electrotechnical activities**
- 2.1 Justification for solutions used to solve electrotechnical engineering problems is documented in work/project development records in accordance with relevant industry standards
  - 2.2 Work completion is documented and relevant person/s notified

## 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 UEENEEE129A Solve electrotechnical engineering problems.

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## **Links**

Companion Volume implementation guides are found in VETNet - -

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