



Australian Government

**UEECD0036 Provide engineering solutions
for problems in complex multiple path
circuits**

Release: 1

UEECD0036 Provide engineering solutions for problems in complex multiple path circuits

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 provide engineering solutions for problems in complex multiple path circuits.

It includes preparing tools, equipment and materials; and providing solutions for complex multiple path circuits. It also includes completing work and documentation.

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 Prepare tools, equipment and materials for problem solving

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) 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 circuit/s problems are obtained from documentation and/or work instructions to determine the work
 - 1.4** Advice is sought from the work supervisor to ensure the work is coordinated with others
 - 1.5** Materials required for work are identified and accessed in accordance with workplace procedures
 - 1.6** Tools, equipment and testing devices required for work are obtained and checked for correct operation and safety
- 2 Provide solutions for complex multiple path circuits**
- 2.1** WHS/OHS risk control work measures and workplace procedures are followed
 - 2.2** Inspect and test live work is conducted in accordance with WHS/OHS requirements and workplace procedures
 - 2.3** Circuits are checked and isolated as required in accordance with WHS/OHS requirements and workplace procedures
 - 2.4** Methods used to solve circuit problems are used from measured and calculated values as they apply to complex multiple path circuits
 - 2.5** Unplanned situations are dealt with in accordance with WHS/OHS and approval of a relevant person
 - 2.6** Problems are solved without damage to apparatus, circuits, the surrounding environment and/or services using sustainable energy practices
- 3 Complete work and documentation**
- 3.1** WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2** Worksite is cleaned and made safe in accordance with workplace procedures
 - 3.3** Justification for solutions used to solve circuit problems is documented
 - 3.4** Work completion is documented and relevant person/s notified 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.

Solving circuit problems must include at least two of the following:

- determining the operating parameters of an existing circuit
- altering an existing circuit to comply with specified operating parameters
- developing circuits to comply with a specified function and operating parameters
- developing circuits to comply with specified functions using established methods

Unit Mapping Information

This unit replaces and is equivalent to UEENEEE125A Provide engineering solutions for problems in complex multiple path circuits.

Links

Companion Volume implementation guides are found in VETNet - -

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