



Australian Government

UEEEEC0017 Develop engineering solutions to analogue electronic 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 develop engineering solutions to analogue electronic problems.

It includes preparing to develop engineering solutions for analogue electronic problems; developing engineering solutions for analogue electronic problems; testing, reporting on and implementing engineering solution for analogue electronic problems.

Permits may be required for some work environments, such as confined spaces, working aloft, near live electrical apparatus, site rehabilitation

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

Pre-requisite Unit

UEEEEC0067 Troubleshoot basic amplifier circuits

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to develop engineering solutions for analogue electronic

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 relevant work area are identified, obtained and

problems	applied
	1.2 Risk control measures are applied in accordance with workplace procedures prior to commencing work
	1.3 Extent of the analogue electronic problem is determined from performance specifications, situation reports and in consultation with relevant person/s
	1.4 Activities are planned to meet scheduled timelines in consultation with relevant person/s
	1.5 Effective strategies are identified to ensure solution development and implementation is conducted efficiently
2 Develop engineering solution for analogue electronic problems	2.1 Workplace risk control measures and procedures are applied
	2.2 Principles of analogue electronics circuit device operation characteristics and applications are applied to developing solutions to analogue electronic problems
	2.3 Parameters, specifications and performance requirements related to each analogue electronic problem are obtained in accordance with workplace procedures
	2.4 Approaches to resolving analogue electronic problems are analysed to determine most effective solutions
	2.5 Unplanned events are dealt with safely and effectively in compliance with regulatory requirements and enterprise policies
	2.6 Quality of work is monitored against relevant performance measures and/or established organisational or professional standards
3 Test, report on and implement engineering solution for analogue electronic problems	3.1 Solutions to analogue electronic problems are tested to determine their effectiveness and modified where necessary
	3.2 Adopted solutions are recorded in the required format, including implementation instructions and risk controls
	3.3 Relevant qualified person/s required to implement solutions to analogue electronic problems are

coordinated in accordance with regulatory requirements and workplace procedures

- 3.4** Justification for solutions used to solve analogue electronic problems is recorded for inclusion in work/project development records in accordance with professional standards

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.

Developing engineering solutions for analogue electronic problems must include at least the following:

- two analogue electronic problems

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH145A Develop engineering solutions to analogue electronic problems.

Links

Companion Volume implementation guides are found in VETNet - -

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