



**Australian Government**

# **UEEEEC0064 Solve oscillator problems**

**Release: 1**

# UEEEEC0064 Solve oscillator 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 oscillator problems.

It includes preparing to work on oscillator sections, solving oscillator section problems, completing work and reporting problem-solving activities.

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

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

## Pre-requisite Unit

UEEEEC0074 Troubleshoot resonance circuits in an electronic apparatus

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 work on oscillator sections

### 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 applied

- 1.2 Risk control measures are applied in accordance with workplace procedures prior to commencing work
  - 1.3 Nature of oscillator problems is obtained from documentation or relevant person/s to determine the scope of work
  - 1.4 Instructions for coordinating work with others are obtained from relevant person/s and applied
  - 1.5 Materials required for work are determined 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 Solve oscillator section problems**
- 2.1 Workplace risk control measures and procedures are applied
  - 2.2 Need to test and measure live work is determined 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 Appropriate methods are used to solve problems from measured and calculated values as they apply to oscillator sections in an electronic apparatus
  - 2.5 Unplanned situations are dealt with safely and with the approval of relevant person/s
  - 2.6 Problems are solved without unnecessary damage to apparatus circuits, the surrounding environment or services applying sustainable energy practices
- 3 Complete work and report problem-solving activities**
- 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 reported in accordance with workplace procedures and job specifications

- 3.4** Work completion reporting is completed 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 oscillator problems must include at least the following:

- three problems in typical oscillator sections of electronic apparatus

## Unit Mapping Information

This unit replaces and is equivalent to UEENEEH142A Solve oscillator problems.

## Links

Companion Volume implementation guides are found in VETNet - -

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