

1. Module details**Module name****Apply computation when using equipment/materials/concepts in an Electrotech environment – Work performance****Module duration**

The time taken to complete this module will vary depending on the opportunities in the work place for learner's to develop their skills and the method used to obtain evidence of competent performance. Where evidence is obtained through formalised assessment event(s) under simulated conditions, it would normally take a learner a minimum of 40 hours to successfully complete the module.

Module code**NEWP057****Discipline code****2. Module purpose**

This module provides methods and criteria for gathering evidence that shows a person has achieved the levels of performance specified in Unit NES 057 “Apply computation when using equipment/materials/concepts in an Electrotech environment”.

3. Prerequisites

This module shall be undertaken in conjunction with modules that provide the knowledge and skills underpinning performance.

4. Relationship to competency standards

This module supports Unit UTE NES 057A “Apply computation when using equipment/materials/concepts in an Electrotech environment” of the Electrotechnology Competency Standards included in the National Electrotechnology Training Package UTE-99.

5. Assessment strategy**Assessment methods**

Evidence of competent performance may be gathered from real work activities, which are recorded by the use of work reports, logbooks, profiles, or portfolios. The learner's immediate supervisor shall confirm the accuracy of the evidence the learner presents in this way. The supervisor must be competent in the area.

Conditions of assessment

Evidence of competent performance can be gathered from the workplace or a simulated work environment. A simulated environment would necessarily include the necessary range of equipment, systems and resources similar to those encountered in a real workplace. As well as the generic aspects of competency, assessment should take into account variations between particular industry sectors and different enterprises. For example equipment used in process industry will be different in some respects to that used in mining.

Assessment criteria

In judging work performance it is essential that evidence regarding the following aspects of competency is considered.

- Performance is independent under direct supervision and to **requirements** and **occurs on at least 2 occasions for each of the following elements**:
 - Plan and prepare to apply computation when using equipment/materials/concepts
 - Carry out computations when using equipment/materials/concepts
 - Confirm results of computations when using equipment/materials/concepts
- and in relation to a **representative range** of applying computations when using equipment/materials/concepts used in either one or more of the following **Category** areas
 - *Computer Systems*
 - *Data Communications*
 - *Electronics*
 - *Electrical*
 - *Instrumentation*
 - *Refrigeration and Air conditioning*

Apply computation when using equipment/materials/concepts in an Electrotech environment in any one or more of the above *categories* across a *representative range* of apparatus and associated systems must be appropriately demonstrated on-the-job in real work activities or equivalent simulated environment. The remainder may be achieved by the combined effect of relevant off-the-job training and/or the skill transfer from prior satisfactory completion of other related development, work performance or units of competency.

- Applying **established procedures, techniques, procedures, information, and/or resources** relevant to performance.

Judgement should be made on evidence gathered from a number of events and over a period showing the development of competent work performance. It should also include any interdependent units of competency and all the specified underpinning knowledge and skills listed in the Underpinning Knowledge and Skills specification of the Unit of Competency NES 057.

Note: words shown in *italics* in this Workperformance Module have a specific definition and intended scope of application, eg. *requirements, representative range, etc.* Such is described in the Glossary of the National Electrotechnology Training Package and forms an integral part of this module.

Resource requirements

Resources should be sufficient for participants to carry out activities, from which evidence may be gathered, on an individual basis. This will include access to tools, equipment, resources, standards, and other equipment/documents that are necessary to perform the activities required.

Occupational health and safety requirements

A safe and healthy environment will be provided for participants and assessors as well as safety procedure with regard to assessment activity.