

**1. Module details****Module name****Monitor Energy Usage In a Electrotechnology Context Work Performance.****Module duration**

The time taken to complete this module will vary depending on the opportunities in the work place for student'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 student 4 hours to successfully complete the module.

**Module code****NEWP011****Discipline code**

0703110 Electrical Installation &amp; Maintenance

**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: NES0011 Monitor energy usage in an electrotechnology context.

**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 NES011 Monitor energy usage in an electrotechnology context of the Electrotechnology Competency Standard.

**5. Content**

Appropriate workplace experience or equivalent.

**6. 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 student's immediate supervisor shall confirm the accuracy of the evidence the student 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 equipment and wiring systems 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 industries will be different in some respects to that used in Mining.

**7. Learning outcome details**

**Learning outcome 1**

**Assessment criteria**

To demonstrate appropriate workplace experience.

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

\* Performance is autonomous and to requirements and occurs on at least 3 occasions for each of the following elements:

- Prepare to monitor energy usage
- Undertake monitoring of energy usage
- Complete monitoring activities

\* and at least 4 of the following apparatus and associated circuits:

- Monitoring of energy usage in premises
- Advising on thermal insulation, ventilation and glazing methods
- Undertaking building electrical retrofits to reduce energy usage
- Advising on and/or installing energy efficient lighting products and systems
- Suggesting improvements in passive design of structures
- Programming systems for energy efficient control
- Maintaining efficiency of climate control systems

\* Applying techniques, procedures, information and 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.

**8. Delivery of the module**

**Delivery strategy**

For workplace delivery

**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, standards and other 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.

