



**Australian Government**

**Assessment Requirements for UEECD0022  
Identify building techniques, methods and  
materials used in energy sector work  
activities**

# **Assessment Requirements for UEECD0022 Identify building techniques, methods and materials used in energy sector work activities**

## **Modification History**

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

## **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- understanding work instructions
- obtaining and checking tools and equipment
- following work schedules
- returning tools and surplus resources as required
- updating work records
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- confirming building techniques, methods and materials used
- identifying building techniques, methods and materials.

## **Knowledge Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- energy sector science and materials, including:
  - trade calculations encompassing:
    - mathematical techniques
    - relevant calculations
    - linear measurement, areas, volumes and ratios
  - engineering mechanics encompassing:
    - base physical International System of Units (SI), their applications in engineering calculations in relation to physical quantities and associated formulae
    - mass, velocity, acceleration, force, weight, density and angles
    - energy/work/power
    - moments/torque

- centre of gravity
- mechanical advantage
- levers
- pulley blocks
- efficiency
- friction
- vectors
- resolution of forces
- forces in strung conductors
- forces on poles and towers
- determination of sag
- pressure/stress
- elementary fluid mechanics
- engineering materials encompassing:
  - classification
  - ferrous and non-ferrous metals
  - steels and alloys
  - properties
  - tensile strength
  - temperature and expansion in metals
  - stress and strain
  - ductility
  - applications
  - corrosion
  - galvanic corrosion
  - hardwoods and soft woods
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- sustainable energy principles and practices.

## Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

## Links

Companion Volume implementation guides are found in VETNet - -

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