



Australian Government

UEEEEC0007 Commission electronics and communications systems

Release: 1

UEEEEC0007 Commission electronics and communications systems

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 commission electronics and communications systems.

It includes undertaking commissioning procedures of electronics and communications systems to comply with predetermined parameters and delivery to client. It also includes working safely, testing system parameters, analysing and adjusting to assure optimum performance, following workplace procedures, and documenting final operating parameters and settings.

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

Not applicable

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare electronics and

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

communications system		for a given work area are obtained and applied
	1.2	WHS/OHS risk control measures and workplace procedures in preparation for the electronics work are followed
	1.3	Safety hazards that have not previously been identified are noted on job safety assessment, assessed and risk control measures implemented
	1.4	Appropriate person/s is consulted to ensure the electronics work is coordinated effectively with others involved on the worksite
	1.5	System operating parameters are identified by reviewing system specifications and component technical data
	1.6	Tools, equipment and testing devices needed for the electronics work are obtained in accordance with workplace procedures and checked for correct operation and safety
	1.7	Preparatory work is checked to ensure no unnecessary damage has occurred and complies with requirements
	1.8	Circuits are checked and isolated in accordance with WHS/OHS requirements and workplace procedures
2	Commission electronics and communications system	
	2.1	WHS/OHS risk control measures and workplace procedures for carrying out commissioning work are followed
	2.2	Testing/measuring devices are connected and set up in accordance with job requirements for the communication system
	2.3	Measurements and adjustments are made to electronics and communications equipment to provide optimum system performance in accordance with system specifications and/or regulatory requirements
	2.4	Unplanned situations are responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
	2.5	Methods for dealing with unexpected situations are selected on the basis of safety and specified work outcomes

- | | | |
|---|------------|--|
| | 2.6 | System commissioning workplace procedures are performed in accordance with job requirements and industry standards |
| | 2.7 | Commissioning is carried out efficiently without unnecessary waste of materials or damage to electronic apparatus, the surrounding environment or services using sustainable energy principles |
| 3 Complete and report commissioning activities | 3.1 | WHS/OHS risk control work completion measures and workplace procedures are followed |
| | 3.2 | Adjustment settings are documented in accordance with workplace procedures |
| | 3.3 | Worksite is cleaned and made safe in accordance with workplace procedures |
| | 3.4 | Commissioning results and work completion are communicated to appropriate person/s in accordance with established 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.

Commissioning electronics and communications systems must include at least the following:

- two different types of electronics and communications systems

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH167A Commission electronics and communications systems.

Links

Companion Volume implementation guides are found in VETNet - -

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

Assessment Requirements for UEEEC0007 Commission electronics and communications systems

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, performance criteria and range of conditions on at least one occasion and includes:

- identifying system design performance parameters and requirements
- measuring and adjusting system components to provide optimum system performance
- ensuring system operates within regulatory and/or specification requirements
- documenting adjustment settings with established procedures
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, workplace procedures and practices, including using risk control measures
- applying sustainable energy principles and practices.

Knowledge Evidence

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

- electronic and communication systems commissioning
- commissioning processes:
 - purpose of commissioning
 - commissioning planning and documentation
 - procedures for commissioning systems encompassing:
 - configuring
 - calibrating
 - tuning
 - validating system performance to specification
 - procedures followed to commission instrument systems
 - purpose and importance of documentation
- project to be carried out in accordance with current WHS/OHS procedures
- relevant job safety assessments or risk mitigation processes

- relevant manufacturer specifications
- relevant workplace documentation
- relevant workplace policies and procedures.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable 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 simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to commissioning electronics and communications systems
- 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>