



Australian Government

UEEDV0011 Set up and configure basic data communication systems

Release: 1

UEEDV0011 Set up and configure basic data communication 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 set up and configure basic data communication systems.

It includes working safely, installing data communications hardware, installing and configuring data communications software, and completing documentation.

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

Pre-requisite Unit

UEECS0003 Assemble, set up and test computing devices

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Data and Voice

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to set up and configure data communication systems

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 a given work area are identified, obtained and applied

- 1.2 Set-up and configuration work are determined from job specifications and in consultation with relevant person/s
 - 1.3 Relevant person/s is consulted to ensure work is coordinated effectively with others involved on the worksite
 - 1.4 Hardware and software required for work are obtained in accordance with workplace procedures and job specifications
 - 1.5 Preparatory work is checked to ensure no damage has occurred in accordance with workplace procedures and job specifications
- 2 **Set up, configure and maintain data communication equipment**
 - 2.1 WHS/OHS risk control measures and workplace procedures for carrying out the work are followed
 - 2.2 Layout of data communications hardware cabling and outlets is determined from job specifications and/or in consultation with relevant person/s
 - 2.3 Hardware is installed in accordance with the data communications system requirements
 - 2.4 Data communications software is installed and configured in accordance with network requirements
 - 2.5 Data communications operations are tested and anomalies identified and corrected
 - 2.6 Reported data communications failures and faults are reviewed and relevant tools and methods are used in accordance with workplace procedures
 - 2.7 Identified causes of reported problems are rectified and the data communications link is tested in accordance with workplace procedures
 - 2.8 Unplanned situations are dealt with safely and with the approval of relevant person/s
 - 2.9 Set-up configuration and maintenance are carried out efficiently without waste of materials or damage to apparatus, surrounding environment and/or services using sustainable energy practices
- 3 **Complete work and**
 - 3.1 WHS/OHS risk control work completion measures and

document activities

workplace procedures are followed

- 3.2** Worksite is cleaned and made safe in accordance with workplace procedures
- 3.3** Data communications configuration and maintenance records are maintained in accordance with workplace procedures
- 3.4** Service report is completed and forwarded to relevant person/s 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.

Setting up and configuring data communications systems must include at least the following:

- communication modem/s
- communication port/s

Unit Mapping Information

This unit replaces and is equivalent to UEENEEF114A Set up and configure basic data communication 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 UEEDV0011 Set up and configure basic data communication 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 two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- carrying out set-up configuration and maintenance efficiently without waste of materials or damage to apparatus, surrounding environment and/or services using sustainable energy practices
- completing work and documenting activities
- dealing with unplanned situations
- determining layout of data communications hardware cabling and outlets
- determining the extent of work schedule
- documenting network configurations and activity results for future referencing
- finding the cause of faults
- identifying and correcting anomalies
- installing and configuring software to requirements
- installing data communications software
- installing hardware
- laying out network in accordance with job specifications
- obtaining specified hardware and software
- preparing to set up and configure data communication systems
- rectifying identified causes of reported problems
- reviewing reported data communications failures and faults
- setting up, configuring and maintaining data communication equipment
- testing data communications operations.

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:

- characteristics and limitations of the types of transmission media
- communications configuration and maintenance records
- problem-solving techniques
- process of data transmission
- protocols
- relevant data communications software
- relevant manufacturer specifications and operating instructions
- relevant job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace documentation, including communications configuration and maintenance records
- relevant workplace policies and procedures
- sustainable energy principles
- types, characteristic specifications and limitations of fibre optic systems
- types, characteristics and limitations of modems and interface standards.

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 simulated suitable 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, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to setting up and configuring basic data 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>