



Australian Government

Assessment Requirements for UEECS0010 Design and implement wireless LANs/WANs for internetworking systems

Release: 1

Assessment Requirements for UEECS0010 Design and implement wireless LANs/WANs for internetworking 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:

- acquiring media for internetworking system design specification
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements
- conducting wireless local area network (WLAN) maintenance and troubleshooting
- configuring and testing a controller-based WLAN
- configuring and testing WLAN security
- designing internetworking system with economical design solutions
- developing a design brief for advanced wireless local area network (LAN)/wide area network (WAN) technologies in an internetworking system design brief
- documenting and presenting design for approval
- documenting internetworking installation and configuration activities
- identifying and rectifying system malfunctions and performance issues
- implementing internetworking system design, including advanced wireless LAN/WAN technologies in internetworking system design
- monitoring quality of work
- negotiating alterations to internetworking system design
- planning and conducting a site survey for setting up a wireless network
- preparing to design wireless internetworking system
- selecting relevant development tools and software
- using technologies and media specifications used in the design of advanced wireless LAN/WAN technologies.

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:

- access points

- advanced wireless LAN/WAN technologies
- antennas
- application design and site survey preparation
- authentication and encryption methods
- emerging technologies
- radio frequency (RF) fundamentals
- relevant industry standards
- relevant manufacturer specifications
- relevant media
- security
- troubleshooting, management, monitoring and diagnostics
- wireless bridges and routers
- wireless LAN/WAN network management software tools
- wireless radio technologies
- wireless roaming
- wireless standards
- wireless topologies
- WLAN architecture and devices
- WLAN implementation and deployment.

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
- 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>

