



Australian Government

UEEEEC0052 Program and test large security systems

Release: 1

UEEEEC0052 Program and test large security 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 program and test large security systems.

It includes programming functions and testing electronic security system with over 50 connected devices in buildings, premises and precincts. It also includes working safely, programming and adjusting security devices, system testing and following written and oral instructions and procedures.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, skills and knowledge described in this unit require a relevant contract of training, such as an Australian Apprenticeship.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

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

Pre-requisite Unit

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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEEEEC0003 Assemble and set up basic security systems

UEEEEC0050 Program and commission commercial security systems

UEEEEC0048 Program and commission commercial access control security systems

UEEEEC0049 Program and commission commercial security closed-circuit television systems

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare to program and test large security system

- 1.1** WHS/OHS requirements and workplace procedures for a given work area are identified and applied
- 1.2** WHS/OHS risk control measures are followed in preparation for electronic security system work
- 1.3** Safety hazards not previously identified are risk assessed, reported and advice on risk control measures sought from work supervisor
- 1.4** Nature and location of electronic security system work is obtained from work supervisor or other appropriate person/s to determine the scope of work to be undertaken
- 1.5** Advice is sought from work supervisor or other appropriate person/s to ensure electronic security system work is coordinated effectively with others
- 1.6** Sources of materials required for electronic security system work are established in accordance with workplace procedure
- 1.7** Tools, equipment and testing devices needed to carry out security system work are obtained and checked for correct operation and safety

2 Program and test large wired and wireless security system

- 2.1** WHS/OHS risk control measures for carrying out the work are followed
- 2.2** Circuits/machines/plant are checked and isolated in accordance with WHS/OHS requirements and

- workplace procedures
- 2.3 Security devices are checked for correct location and alignment
 - 2.4 Security function codes are entered into the electronic security system in accordance with manufacturer instructions
 - 2.5 Security system is inspected and tested in accordance with manufacturer instructions
 - 2.6 Security system operational defects are identified and corrected
 - 2.7 Unplanned situations are responded to in accordance with workplace procedures and the approval of authorised person/s in a manner that minimises risk to personnel and equipment
 - 2.8 Security programming and testing is carried out efficiently without waste of materials or damage to apparatus, circuits or the surrounding environment using sustainable energy practices
- 3 Complete and document security system programming and testing**
- 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2 Worksite is cleaned and made safe in accordance with workplace procedures
 - 3.3 Security system is documented in accordance with regulatory requirement and 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.

Security systems must have controllers and more than 50 connected devices of five different types and include at least the following:

- programming and testing of large wired and wireless security systems on two large security systems

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH153A Program and test large security 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 UEEEC0052 Program and test large security systems

Modification History

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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 include:

- entering system instructions
- testing system functions
- identifying and correcting operational malfunctions
- documenting 'as-installed' system correctly
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (WHS) 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:

- security systems programming methods, including:
 - vender programming codes and functions encompassing:
 - input/output (I/O) instruction
 - variable
 - timers
 - limitations of vender software
 - program loading methods using a personal computer (PC)
 - program testing methods
 - relevant manufacturer specifications
 - relevant job safety assessments or risk mitigation processes
 - relevant WHS/OHS legislated requirements
 - 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, facilities, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to programming and testing large wired and wireless security 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>