



Australian Government

UEEEEC0026 Enter and verify programs for fire protection systems

Release: 1

UEEEEC0026 Enter and verify programs for fire protection 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 enter and verify programs for fire protection systems.

It includes programming fire protection systems that include multiple connected detection, warning and fire control devices and remote monitoring. It also includes working safely, using fire protection industry standards and protocols, entering system instructions, testing functionality of fire protection components and system operation, and documenting activities.

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

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

UEEEEC0041 Install fire detection and warning system apparatus

UEEEEC0076 Verify compliance and functionality of fire protection system installations

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to enter operating instructions

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified and applied
- 1.2** WHS/OHS risk control measures and procedures are followed in preparation for the work
- 1.3** Safety hazards that have not previously been identified are assessed, reported and advice on risk control measures sought from work supervisor
- 1.4** Extent of programming work is determined from job specifications and in consultation with appropriate person/s
- 1.5** Tools, equipment and testing devices needed to carry out fire protection work activities are obtained and checked for correct operation and safety
- 1.6** Fire protection device installation is checked for compliance with job specification, industry standards and regulations

2 Enter software operating instructions

- 2.1** WHS/OHS risk control measures and workplace procedures 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** Status of each function of the fire protection device is entered and their parameters set in accordance with manufacturer programming instructions
- 2.4** Entered data is checked as meeting those specified by work activity and job specifications
- 2.5** Unplanned situations are responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- 2.6** Programming is carried out efficiently without waste of materials and energy or damage to apparatus, the

- surrounding environment or other services
- 3 Test fire protection device operation and report findings**
- 3.1** Fire protection device operation is tested in accordance with WHS/OHS requirements and workplace procedures
 - 3.2** Operating anomalies are identified and corrected in accordance with workplace procedure
 - 3.3** WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.4** Worksite is cleaned and made safe in accordance with workplace procedures
 - 3.5** Work completion is reported and appropriate person/s notified in accordance with workplace procedure

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.

Entering and verifying programs for fire protection systems must include at least the following:

- two types of microprocessor fire protection control and indicating equipment with:
 - at least 50 input devices
 - at least 20 output devices
 - at least 1 system interface control
 - at least 2 logic timers
 - system variables

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH163A Enter and verify programs for fire protection 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 UEEEC0026 Enter and verify programs for fire protection systems

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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 two separate occasions and include:

- apply sustainable energy principles and practices
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- correcting programming anomalies
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- entering functions and parameters correctly
- identifying non-compliance conditions of device installation
- performing program backups, version controls and documentation
- testing and verifying device operation
- understanding required operating functions and parameters.

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:

- fire protection systems programming methods
- input devices, including conventional alarm zones, analogue or analogue addressable fire detectors, flow switch connections or switch connections
- logic times, including software programs that control the operation of non-latching detectors and timer periods before operation of fire system suppression systems
- output devices, including shutdown signal, door or system release controls and solenoid valve controls
- program backup, version control and documentation requirements
- program loading methods and relevant information technology
- 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
- system interface controls, including verify signals to remote control and indicating equipment, building monitoring systems, paging system and colour graphics
- system variables, including standard software functions that operate smoke detector controls, dual zone alarm configurations, alarm and fault global functions
- vender programming codes and functions, including:
 - input/output (I/O) instructions
 - variables
 - timers
 - limitations of vender software.

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 entering and verifying programs for fire protection systems
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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