



Australian Government

UEEIC0009 Develop an electrical integrated system interface for access through a touch screen

Release: 1

UEEIC0009 Develop an electrical integrated system interface for access through a touch screen

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 develop an electrical integrated system interface for access through a touch screen.

It includes preparing and developing an integrated system touch screen interface. It also includes backing up, transferring and testing touch screen interface integrated system, working with customers to determine required control parameters, application of touch screen software components and embellishments, network connectivity, using diagnostic tools and documenting the developed systems.

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

Pre-requisite Unit

Where prerequisite pathways have been identified, all competencies in the Common Unit Group must be have been completed plus all the competencies in one (1) of the identified Pathway Unit Group(s):

Electrical

Common Unit Group

ICTICT203 Operate application software packages

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

UEEIC0011 Develop electrical integrated systems

Electrotechnology Pathway Group

UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits

Electrical Pathway Group

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

Competency Field

Instrumentation & Control

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to develop an integrated system touch screen interface

PERFORMANCE CRITERIA

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

- 1.1** Areas and controls accessed from touch screen are determined from integrated systems, database and customer requirements
- 1.2** Control parameters accessed from touch screen are determined from integrated systems database and confirmed with relevant person/s
- 1.3** Applied enhancements to touch screen are discussed and confirmed with relevant person/s
- 1.4** Touch screen and integrated system programming software incorporating project specifications are downloaded to compatible information technology
- 1.5** Programming tools are used and checked for quality assurance
- 1.6** Manufacturer instructions for installing and connecting touch screens are obtained and identified

2 Develop an integrated system touch screen interface

- 2.1** Hazards are identified, risks are assessed and control measures implemented
- 2.2** Touch screen is checked for compliance with manufacturer requirements, installed and connected
- 2.3** Touch screen interface is developed using current programming methods
- 2.4** Touch screen interface functions and enhancements are developed for compatibility with integrated system and

		customer requirements										
	2.5	Network connectivity is implemented, as required, and web page content made available										
3	Back up, transfer and test touch screen interface	<table><tr><td>3.1</td><td>Work health and safety (WHS)/occupational health and safety (OHS) work completion risk control measures and workplace procedures are followed</td></tr><tr><td>3.2</td><td>Touch screen interface program is backed up and transferred to the touch screen following manufacturer instructions</td></tr><tr><td>3.3</td><td>Touch screen tests are conducted to verify compatibility and compliance with the integrated system and customer requirements</td></tr><tr><td>3.4</td><td>Anomalies are identified and corrected to comply with manufacturer and customer requirements</td></tr><tr><td>3.5</td><td>As-programmed touch screen specifications are documented and given to relevant person/s in accordance with workplace procedures</td></tr></table>	3.1	Work health and safety (WHS)/occupational health and safety (OHS) work completion risk control measures and workplace procedures are followed	3.2	Touch screen interface program is backed up and transferred to the touch screen following manufacturer instructions	3.3	Touch screen tests are conducted to verify compatibility and compliance with the integrated system and customer requirements	3.4	Anomalies are identified and corrected to comply with manufacturer and customer requirements	3.5	As-programmed touch screen specifications are documented and given to relevant person/s in accordance with workplace procedures
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3.5	As-programmed touch screen specifications are documented and given 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.

Manufacturer designated software must include at least the following:

- programming a touch screen for safe and effective operation
- creating and editing scenes, schedules and access control
- using templates to enhance a touch screen
- backing up and restoring program
- transferring the programmed access to touch screen in an integrated system

Unit Mapping Information

This unit replaces and is equivalent to UEENEEI142A Develop an electrical integrated system interface for access through a touch screen.

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 UEEIC0009 Develop an electrical integrated system interface for access through a touch screen

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:

- determining the areas and control parameters to be accessed through the touch screen
- confirming touch screen embellishments to be applied
- downloading to a personal computer (PC) and checking touch screen programming and integrated system programming software and project data
- understanding manufacturer's instruction for installing and connecting touch screens
- checking that the installation and connections for the touch screen comply with manufacturer requirements
- developing touch screen interface functions and embellishments in accordance with compatibility with the integrated system and to customer requirements
- backing up and transferring touch screen interface program following manufacturer's instructions
- testing touch screen and correcting non-compliance operations and anomalies
- documenting the as-programmed touch screen specifications
- applying relevant workplace health and safety (WHS)/occupational health and safety (OHS) requirements, including implementing risk control measures
- checking programming for quality assurance
- implementing network connectivity and making web page content available.

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:

- touch screen installation requirements and programming in integrated systems, including:
 - integrated system touch screen types, features and parameters
 - touch screen mounting methods and manufacturer's instructions
 - touch screen wiring and connection arrangements encompassing:
 - power supply

- integrated network
- audio
- video
- IR control
- programming
- network
- electrical protection requirements
- programming requirements and process
- programming software specifications and tools
- human-machine interface (HMI) programming techniques with proprietary software encompassing
 - component types
 - component properties
 - arranging visible properties and creating screen embellishment
 - setting integrated system properties of components (components can be text, images, shapes, buttons, sliders, level indicators, clocks, monitors, hypertext mark-up language (HTML) and web cam images)
- methods for transferring and project data and backing up
- information technology back-up processes
- relevant risk mitigation processes, including risk control measures
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- compliance testing and quality assurance testing.

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 workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in 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 other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry

- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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