



Australian Government

UEEIC0012 Develop structured programs to control external devices

Release: 1

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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 structured programs to control an external device.

It includes identifying and developing structured programs for control sub-systems. It also includes testing and documenting structured programs for control sub-systems.

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

Competency Field

Instrumentation & Control

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Identify structured program requirements for control sub-system

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 are identified and applied
- 1.2** Hazards are identified, risks are assessed and control measures implemented

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| | 1.3 | Extent of structured programming is determined from job specifications and consultations with relevant person/s |
| | 1.4 | Activities are planned to meet scheduled timelines in consultation with relevant person/s |
| | 1.5 | Development kit and software are selected from job specifications and in accordance with workplace procedures |
| | 1.6 | Strategies are implemented to ensure programming is written in accordance with workplace procedures |
| 2 | Develop structured programs for control sub-system | |
| | 2.1 | WHS/OHS risk control measures and procedures for carrying out the work are followed |
| | 2.2 | Information technology functions are applied to develop structured programs |
| | 2.3 | Correct structure and syntax are applied to developing structured program |
| | 2.4 | Programming languages are applied to structured programs to develop and test solutions |
| | 2.5 | Issues/problems are analysed to identify and apply solutions |
| | 2.6 | Quality of work is monitored in accordance with workplace procedures |
| 3 | Test and document structured program for control sub-system | |
| | 3.1 | Developed program is tested in accordance with workplace procedures and manufacturer specifications |
| | 3.2 | Programming anomalies are identified and corrected in accordance with workplace procedures and manufacturer specifications |
| | 3.3 | Work reports are written in accordance with workplace procedures and presented to relevant person/s |

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.

Developing structured programs to control external devices for a given representative range of programs and control devices must include the following attributes:

- safe working practices
- control applications
- knowledge application
- analogue or digital input/output (I/O) signals
- program writing and testing
- documenting programming changes

Unit Mapping Information

This unit replaces and is equivalent to UEENEEI155A Develop structured programs to control external devices.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>