



Australian Government

UEECD0055 Write specifications for industrial electronics and control projects

Release: 1

UEECD0055 Write specifications for industrial electronics and control projects

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 write specifications for industrial electronics and control projects.

It includes determining client expectations, ensuring cost-effective solutions are pursued, and documenting design and technical requirements.

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

Pre-requisite Unit

Not applicable

Competency Field

Cross Discipline

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare specification requirements

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) processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2** Techniques for specification writing are reviewed and adopted in accordance with workplace procedures

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| | 1.3 | Scope of industrial electronics and control projects specification is determined using formal evaluation/survey processes |
| | 1.4 | Criteria from related works impacting on specification are determined from relevant documentation, site visits and/or in consultation with relevant person/s |
| 2 Write specification | 2.1 | Specification is developed to include scenarios and requirements in consultation with relevant person/s and relevant industry standards |
| | 2.2 | Specification is developed in collaboration with relevant design professionals and contractors involved in the project |
| | 2.3 | Relevant person/s required for project are identified and roles specified in the specification |
| | 2.4 | Specification is reviewed against inputs and adjusted to rectify any anomalies |
| | 2.5 | Specification is developed and documented in accordance with workplace procedures |
| 3 Obtain approval of specification | 3.1 | Specification is presented and discussed with relevant person/s |
| | 3.2 | Alterations to specification resulting from discussions are negotiated with relevant person/s in accordance with workplace procedures |
| | 3.3 | Specification is finalised and approval obtained from 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 specification must include at least one medium-sized industrial electronics and control project and include at least the following:

- safety requirements met
- client expectations established
- cost-effective solutions pursued and assured
- design and technical requirements documented

Unit Mapping Information

This unit replaces and is equivalent to UEENEEE075B Write specifications for industrial electronics and control projects.

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 UEECD0055 Write specifications for industrial electronics and control projects

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 two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including
 - using risk control measures
- determining scope of the specification industrial electronics and control projects
- determining the impact of related works.
- developing and documenting specifications
- developing specification in collaboration with relevant person/s
- developing specification incorporating scenarios and requirements
- negotiating alterations to the proposed specification
- obtaining approval of the final specification
- preparing specification requirements
- presenting and discussing specification
- reviewing and adopting techniques for specification writing
- reviewing inputs and rectifying anomalies.

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:

- relevant design professionals, suppliers and manufacturers
- relevant industrial electronics and control engineering specifications
- relevant industry standards
- relevant manufacturer specifications
- relevant research skills
- relevant job safety assessments or risk mitigation processes
- relevant specification inputs and anomalies
- relevant specification writing techniques

- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace instructions, 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 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
- resources that reflect current industry practices in relation to writing specifications for industrial electronics and control engineering projects.
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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