



Australian Government

UEEIC0001 Analyse complex electronic circuits controlling fluids

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 analyse complex electronic circuits that integrate with the operation of fluid control systems on machinery.

It includes working safely, applying knowledge of equipment and electronic and fluid control circuit operations, gathering and analysing data, applying problem-solving techniques, and developing and documenting solutions and alternatives.

Typical problems are those encountered in meeting performance requirements and compliance standards, revising machine operating parameters and dealing with function.

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

Pre-requisite Unit

Not applicable

Competency Field

Instrumentation & Control

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

- 1 Prepare to analyse complex circuits controlling fluids

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

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| | <ul style="list-style-type: none">1.2 Hazards are identified, WHS/OHS risks assessed, and control measures and workplace procedures implemented in preparation for work1.3 Scope of circuit analysis is determined from performance specifications, situation reports and in consultation with relevant person/s1.4 Activities are planned to meet scheduled timelines in consultation with person/s involved in the work1.5 Strategies are determined, solution developed and implemented in accordance with workplace procedures |
| 2 Undertake analysis of complex circuits controlling fluids | <ul style="list-style-type: none">2.1 WHS/OHS risk control measures and workplace procedures for carrying out the work are followed2.2 Control concepts and electro-fluid control circuits are applied in developing analytical solutions to machine parameters/faults and operation2.3 Parameter specifications and performance requirements in relation to each circuit are obtained in accordance with workplace procedures and relevant industry standards2.4 Circuit parameters and specifications are analysed to provide the most effective solution/s in accordance with workplace procedures2.5 Unplanned events are dealt with safely and effectively consistent with regulatory requirements and workplace policies and procedures2.6 Quality of work is monitored in accordance with performance agreement and/or workplace procedures or relevant industry standards |
| 3 Document and report result/s of circuit analysis and action/s taken | <ul style="list-style-type: none">3.1 Solutions to circuit analysis are inspected and tested to determine their effectiveness and modified as required3.2 Analysis is documented, including details of fault findings, calculations and assumptions3.3 Analysis is reported to appropriate person/s to determine suitable action/s to be taken based on fault-findings analysis |

- 3.4** Justification for analysis findings and any actions to be undertaken in relation to the equipment is documented for inclusion in work/project records in accordance with relevant industry standards 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.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEI127A Analyse complex electronic circuits controlling fluids.

Links

Companion Volume implementation guides are found in VETNet - -

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