



Australian Government

UEEAS0004 Select electronic components for assembly

Release: 1

UEEAS0004 Select electronic components for assembly

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 select electronic components for assembly from job specifications.

It includes preparing, selecting electronic components for assembly, and completing workplace report.

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

Assembly

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare electronic components

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 for a given work area are identified, obtained and applied
- 1.2** Work instructions are obtained and applied

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|---------------------------------------|-----|---|
| | 1.3 | Advice is sought from supervisor to ensure work is coordinated effectively with others |
| | 1.4 | Materials required for work are obtained in accordance with workplace procedures |
| | 1.5 | Tools, equipment and testing devices needed to carry out work are obtained and checked for correct operation and safety |
| 2 Select electronic components | 2.1 | WHS/OHS risk control measures and workplace procedures are followed |
| | 2.2 | Electronic components are selected, sorted and placed in accordance with work instructions |
| | 2.3 | Problem-solving techniques are used to resolve issues with supply of component in accordance with workplace procedures |
| | 2.4 | Quality checks of components are in accordance with work instructions and relevant industry standards |
| | 2.5 | Work is completed in acceptable timeframe given environment and workplace conditions |
| 3 Complete work report | 3.1 | WHS/OHS risk control measures and workplace procedures for work completion are followed |
| | 3.2 | Workplace report/s on component/s are completed in accordance with work instructions 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.

Selecting components for assembly must include at least two different electronic

- a chassis
- printed circuit board

apparatus. These apparatuses must consist of the following basic features:

- adjustment components and interconnections

Unit Mapping Information

This unit replaces and is equivalent to UEENEEA102A Select electronic components for assembly.

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 UEEAS0004 Select electronic components for assembly

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 / occupational health and safety (WHS/OHS) requirements, including using risk control measures
- completing workplace report
- dealing with unplanned events in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- preparing and selecting electronic components, including:
 - following job specifications
 - identifying and selecting components
 - handling components without damaging
 - adhering to relevant quality procedures
- using problem-solving techniques in accordance with workplace procedures.

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:

- types of components, including resistors, inductors, capacitors, diodes, transistor, integrated circuits, printed circuit boards, sub-assemblies, and mounting/enclosing, connection and termination hardware
- the physical features and primary characteristic of components, including:
 - features, including shape, size and connections
 - characteristics, including parameter and power ratings and polarity
 - methods of identifying and marking of component ratings
 - identifying and handling static sensitive components
 - selection of components
- through-hole component
- surface-mount component

- component handling techniques
- problem-solving techniques
- relevant industry standards
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications, including relevant testing devices
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies, procedures and instructions, including quality inspection and checking workplace procedures
- types of electronic components, including resistors, inductors, capacitors, diodes, transistor, integrated circuits, printed circuit boards, sub-assemblies, and mounting/enclosing, connection and termination hardware.

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 other simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, relevant industry standards, codes of practice and operation manuals.

Links

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