

Australian Government

# **UEEIC0022** Install instrumentation and control apparatus and associated equipment

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 install instrumentation and control apparatus and associated equipment.

It includes preparing and installing instrumentation and control apparatus and associated equipment, as well as completing and reporting installation activities.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, is required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

#### Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEEIC0047 Use instrumentation drawings, specifications, standards and equipment manuals

### **Competency Field**

Instrumentation & Control

#### **Unit Sector**

Electrotechnology

#### **Elements and Performance Criteria**

#### **ELEMENTS**

#### **PERFORMANCE CRITERIA**

Elements describe the essential outcomes.

**1** Identify instrumentation, control apparatus and associated equipment

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

- 1.1 WHS/OHS requirements and workplace procedures are identified and applied
- 1.2 Hazards are identified, risks are assessed and control measures implemented
- 1.3 Safety hazards not previously identified are reported on job safety assessment and advice on risk control measures are implemented
- 1.4 Installation of apparatus is prepared in consultation with relevant person/s and scheduled
- 1.5 Nature and location of work is determined from documentation and/or relevant person/s to determine scope of work
- 1.6 Location of instrumentation, control apparatus and associated equipment is planned within constraints of building structure, significants and regulations
- 1.7 Advice is sought from relevant person/s to ensure work is coordinated with others in accordance with workplace procedures
- Materials needed for installation work are obtained in 1.8 accordance with workplace procedures and checked against job requirements
- 1.9 Tools, equipment and testing devices needed for work are obtained in accordance with workplace procedures and checked for correct operation and safety
- Preparatory work is checked by supervisor to ensure no 1.10 damage has occurred and work complies with job requirements
- 2 Install instrumentation, 2.1 WHS/OHS risk control measures and procedures for carrying out the work are followed
- control apparatus and associated equipment

- **2.2** Need to test or measure live electrical components is determined in accordance with WHS/OHS regulatory requirements and workplace procedures
- **2.3** Circuits/machines/plant are checked and isolated in accordance with workplace procedures
- 2.4 Instrumentation, control apparatus and associated equipment are installed with sufficient excess to adjust and maintain terminations in accordance with technical standards, manufacturer specifications and job requirements
- 2.5 Wiring and tubing is terminated at instrumentation, control apparatus and associated equipment in accordance with manufacturer specifications, functional and regulatory requirements
- **2.6** Unplanned situations are discussed with relevant person/s and documented in accordance with workplace procedures
- **2.7** Unplanned situations are dealt with safely and with approval of authorised person/s in accordance with workplace procedures
- **2.8** Regular quality checks of installed apparatus are undertaken in accordance with workplace procedures
- **2.9** Apparatus installation is performed without waste of materials, damage to apparatus, circuits, surrounding environment or services using sustainable energy principles and practices
- **3.1**WHS/OHS work completion risk control measures and<br/>workplace procedures are followed
  - **3.2** Worksite is cleaned and made safe in accordance with workplace procedures
  - **3.3** Final checks are made to installed apparatus to ensure it meets job requirements
  - **3.4** 'As-installed' apparatus and associated equipment are documented and relevant person/s notified in accordance with workplace procedures

3 Complete and report installation activities

#### 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.

Instrumentation and control apparatus and associated equipment must include at least four of the following:

- pressure measurement apparatus and systems
- temperature measurement apparatus and systems
- level/density measurement apparatus and systems
- flow measurement apparatus and systems
- chemical measurement apparatus and systems

### **Unit Mapping Information**

This unit replaces and is equivalent to UEENEEI108A Install instrumentation and control apparatus and associated equipment.

#### Links

Companion Volume implementation guides are found in VETNet -https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6