

Domain

ELECTRONICS

Title:

Install Electronics Systems

Level: 3

Credits: 20**Purpose**

This unit standard specifies the competencies required to install electronic systems. It include establishing installation requirements, setting up electronic systems and testing system functionality. This unit standard is intended for those who work in electronics industry.

Special Notes

1. Entry information
Prerequisite
 - *Unit E01 - • Apply health and safety rules and regulations in electronics workplace*
 - *Unit E02 - Plan and organise work in electronic work environment*
2. Assessment evidence may be collected from a real or a simulated workplace in which electronics operations are carried out.
3. To demonstrate competence, minimum evidence of the ability to establish installation requirements, set up and test system functionality of at least two electronic systems
4. Glossary of terms:
 - 'OHS' refers to Occupational Health and Safety
 - IEC 60617-This standard is issued by the **International Electro-technical Commission** and this standard for electrical components symbols.
 - IEEE- Institute of Electrical and Electronics Engineers.
5. Performance of all elements in this unit standard must comply with industry standards.
6. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act, No. 11, 2007.
 - Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Establish installation requirements

Range

Electronics systems to be installed include access control system, surveillance system, alarm system, telemetry system, computer system, monitoring and control systems.

Performance Criteria

- 1.1 The need for system installation is identified.
- 1.2 Installation location is identified and site survey is conducted to determine installation feasibility.
- 1.3 Installation location is prepared in accordance with job requirement.
- 1.4 Appropriate systems are compared and selected.
- 1.5 Materials, tools and equipment are selected to meet job requirements.

Element 2: Set up electronic systems

Range

Electronics systems to be setup include access control system, surveillance system, alarm system, telemetry system, computer system, telephone system, monitoring and control systems.

Company procedures include but not limited to health and safety, installation guidelines.

Performance Criteria

- 2.1 Electronic system is assembled using appropriate tools, following installation manual, system drawings, job instructions and company procedures.
- 2.2 Electronic systems are interconnected following system drawings, job instructions and company procedures.

Element 3: Test system functionality

Range

Electronics systems to be tested include access control system, surveillance system, alarm system, telemetry system, computer system, monitoring and control systems.

Performance Criteria

- 3.1 System functionality checklist is prepared and installation manual is interpreted
- 3.2 System functionality is tested using appropriate instrument, following installation manual, system requirement and company procedures.
- 3.3 Identified system errors are rectified.

- 3.4 Test results are documented, filed in accordance to company procedures and communicated to relevant personnel.
- 3.5 Acceptance tests are conducted and a certificate of conformity is signed.

Registration Data

Subfield:	Electrical Engineering
Date first registered:	
Date this version registered:	
Anticipated review:	
Body responsible for review:	Namibia Training Authority

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