

Domain	Instrumentation and control
Title:	Demonstrate knowledge of process control system
Level: 3	Credits: 4

Purpose

This unit standard specifies the competencies required to demonstrate knowledge of process control system. It includes demonstrating knowledge of loop tuning techniques, demonstrating fundamental knowledge of process control system. This unit standard is intended for those who work in instrumentation industry.

Special Notes

1. Entry information:
 - Prerequisite
 - none
2. Assessment evidence may be collected from a real or an appropriate simulated workplace in which Instrument and Control operations are carried out.
3. The evidence required to demonstrate competency in this unit must be relevant to workplace operations.
4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions
4. Glossary of terms:
 - *specifications'* refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements
5. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act 2007, No. 11, 2007
 - Regulations relating to the health & safety of employees at work under Schedule 1 (2) of the Labour Act No.11 of 2007
 - And all subsequent.
 -
6. Performance of all elements in this unit standard must comply with industry standards.

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. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na

Elements and Performance Criteria

Element 1: Demonstrate fundamental knowledge of process control system

Range

Performance Criteria

- 1.1 Different types of process control are described.
- 1.2 Process variable, set point and output is described.
- 1.4 Different modes of operation of control system is listed and explained

Element 2: Demonstrate knowledge of loop tuning techniques

Performance criteria

- 1.1 Types of loop tuning techniques are identified and explained.
- 1.2 Basic principles of tuning techniques are defined.
- 1.3 Properties of tuning techniques are explained.
- 1.4 Advantage and disadvantage of loop tuning techniques are defined.

Registration Data

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