

	Unit ID: 1038
Domain	ROAD CONSTRUCTION AND MAINTENANCE – MATERIAL TESTING
Title:	Use GPS as part of a specified road construction and maintenance activity
Level: 3	Credits: 3

Purpose

This unit standard is intended for those who work in road construction and maintenance operations. People holding credit for this unit standard are able to: Demonstrate knowledge of the GPS; demonstrate the use of GPS; and demonstrate the use of tracklogs.

Special Notes

1. Entry information:
 - Prerequisite
 - Unit 712 - *Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations*
2. Assessment evidence may be collected from a real workplace, a simulated workplace or an appropriately simulated environment in which road construction and maintenance operations are carried out.
3. Glossary of terms:
 - 'GPS' means Global Positioning System.
4. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.
5. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
6. Regulations and legislation relevant to this unit standard include but are not limited to the following:
 - Labour Act, No. 11 of 2007
 - Occupational Health and Safety Regulations No. 18, 1997
 - Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No 53 Road Traffic and Transport Regulations
 - Road Ordinance 1972 and other relevant legislations 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. 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 knowledge of the GPS

Range

GPS primary pages may include but are not limited to satellite page; position page; map page; navigation page; and main menu page.

Terminology may include but is not limited to waypoint; route; goto; crosstrack error (XTK); estimate time of arrival (ETA); and estimate time enroute (ETE).

Performance Criteria

- 1.1 GPS is described in terms of the method by which it calculates and defines the position on the surface of the earth.
- 1.2 The primary pages of a GPS are described in terms of their features.
- 1.3 The method of defining a grid position on the surface of the earth using a GPS is described.
- 1.4 Terminology related to a GPS is described in terms of its practical applications.

Element 2: Demonstrate the use of GPS

Range

Assessment evidence for two (2) specified activities, demonstrating at least two (2) different methods for recording at least six (6) different waypoints.

Performance Criteria

- 2.1 Methods of recording waypoints using a GPS receiver are described.
- 2.2 Waypoints related to specified activities are entered, renamed, and deleted in the GPS.
- 2.3 Waypoints are located within 10 metres accuracy and within a timeframe, which meets workplace specific requirements.

Element 3: Demonstrate the use of tracklogs

Range

Assessment evidence for at least two (2) methods is required.

Performance Criteria

- 3.1 The function of a tracklog is described for a specified activity.

3.2 Tracklogs are recorded using a GPS receiver for a specified activity.

Registration Data

Subfield:	Road Construction and Maintenance
Date first registered:	
Date this version registered:	
Anticipated review:	
Body responsible for review:	Namibia Training Authority