

**National Vocational Certificate in Road Construction and Maintenance (Level 3)
(Heavy Plant Operations - Heavy Plant Operator) with an optional strand for
further skill development**

level of qualification: 3

	Compulsory	Elective	Optional Strand
level 1 credits available	4	-	-
level 2 credits available	47	-	26
level 3 credits available	20	389	-
level 4 credits available	-	25	-
minimum totals required for whole qualification	71	26 - 92	26

registration date: 2011

scheduled review date: 2016

body responsible for the qualification: Roads Authority

other bodies whose unit standards are included in the qualification:

Namibia Training Authority - NTA

1 purpose

This qualification is a direct response to the continuous effort of the Roads Authority to address the lack of adequately skilled human resources in road construction and maintenance. The intention of this qualification is to provide learners with the knowledge, understanding, skills and application techniques that they need to be successful in their work as qualified Heavy Plant Operator. It recognises people who have the competencies required for operating a range of heavy plant as part of road construction and maintenance tasks.

The main focus of this qualification is the attainment of the required outcomes of learning, not the how, when or where learning occurred. Some people applying to attain this qualification may currently be competent in one or more of the unit standards and should then be given the opportunity to apply for recognition of prior learning.

Some of the unit standards making up this qualification require a valid driving licence *Code CE* or equivalent.

This qualification has an optional strand for further skill development in Machine Operations.

This qualification represents a stage of progression to other National Vocational Certificates in Road Construction and Maintenance Level 2, 3 and 4.

2 regulations for the qualification

2.1 summary of qualification requirements

This qualification will be awarded to people who are credited with the requirements of the compulsory and elective section, recognising abilities for carrying out road construction and maintenance activities by using a minimum of any three (3) unit standards from the following domains:

- Machine Operations (*Category: Earthmoving*)
- Machine Operations (*Category: Compaction*)
- Machine Operations (*Category: Surfacing*)
- Machine Operations (*Category: Crushing equipment*)
- Machine Operations (*Category: Transport*)
- Machine Operations (*Category: General*)

The further skill development strand is optional. A minimum of 18 credits is required to attain the strand.

2.2 detailed qualification requirements

Compulsory Set A

The following unit standards are required

FIELD: PHYSICAL PLANNING AND CONSTRUCTION
Subfield: Road Construction and Maintenance
Domain: Road Construction and Maintenance – Core

Unit No.	Unit Standard Title	Level	Credit
707	Maintain records in road construction and maintenance site operations	2	5
711	Carry out basic measurements and calculations for road construction and maintenance	2	8
712	Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations	2	6
714	Demonstrate fundamental knowledge of soils used in road construction and maintenance operations	2	5
715	Demonstrate knowledge of plant used in road construction and maintenance	2	8
716	Request materials, tools and equipment in road construction and maintenance operations	3	8
808	Establish customer relations in the community pertaining road construction maintenance operations	2	2
828	Lead a team to achieve the required project outcome in road construction and maintenance operations	3	4
1043	Extinguish fire by means of basic fire fighting	1	4

	equipment		
1044	Read and interpret working drawings and specifications as part of road construction and maintenance operations	2	5

FIELD: PHYSICAL PLANNING AND CONSTRUCTION
Subfield: Road Construction and Maintenance
Domain: Road Construction and Maintenance – Machine Operations

Unit No.	Unit Standard Title	Level	Credit
831	Carry out road construction and maintenance activities using a tip truck	3	8

FIELD: HEALTH SCIENCES AND SOCIAL SERVICES
Subfield: Core Health
Domain: HIV and AIDS Awareness

Unit No.	Unit Standard Title	Level	Credit
331	Demonstrate knowledge of HIV and AIDS in the workplace	2	4

FIELD: HEALTH SCIENCES AND SOCIAL SERVICES
Subfield: Core Health
Domain: First Aid

Unit No.	Unit Standard Title	Level	Credit
843	Provide basic first aid	2	4

Elective

As a minimum requirement, any three (3) of the following unit standards at level 3 or above from the listed domains are required

FIELD: PHYSICAL PLANNING AND CONSTRUCTION
Subfield: Road Construction and Maintenance
Domain: Road Construction and Maintenance – Machine Operations (*Category: Earthmoving*)

Unit No.	Unit Standard Title	Level	Credit
832	Carry out road construction and maintenance activities using a dozer	3	30

833	Carry out road construction and maintenance activities using a front end loader	3	20
1022	Carry out activities in road construction and maintenance using a grader	3	32
1023	Carry out road construction and maintenance activities using a backhoe loader	3	25
1024	Carry out road construction and maintenance activities using an excavator	3	25

Domain: Road Construction and Maintenance – Machine Operations (*Category: Compaction*)

Unit No.	Unit Standard Title	Level	Credit
1030	Carry out road construction and maintenance activities using a roller	3	30

Domain: Road Construction and Maintenance – Machine Operations (*Category: Surfacing*)

Unit No.	Unit Standard Title	Level	Credit
836	Carry out road construction and maintenance activities using a bitumen distributor truck	3	18
1027	Carry out road construction and maintenance activities using an asphalt paving plant	3	10
1028	Carry out road construction and maintenance activities using a slurry truck	3	6
1029	Carry out road construction and maintenance activities using a chip-spreader	3	15

Domain: Road Construction and Maintenance – Machine Operations (*Category: Crushing Equipment*)

Unit No.	Unit Standard Title	Level	Credit
1033	Process materials in a mobile screening plant	3	15
1034	Operate a static crushing plant	3	12
1036	Produce product using a mobile crushing plant	4	25

Domain: Road Construction and Maintenance – Machine Operations (*Category: Transport*)

Unit No.	Unit Standard Title	Level	Credit
834	Carry out road construction and maintenance activities using a water distributor truck	3	10
835	Carry out road construction and maintenance activities using an articulated dump truck	3	10
1025	Transport large plant or truck using a low-bed truck	3	30
1031	Carry out road construction and maintenance activities using a tipping semi-trailer	3	15
1032	Carry out road construction and maintenance activities using a concrete transport truck	3	20

Domain: Road Construction and Maintenance – Machine Operations (*Category: General*)

Unit No.	Unit Standard Title	Level	Credit
1039	Carry out road construction and maintenance activities using a mobile elevating platform	3	15
1040	Carry out road marking operations using a truck-mounted road marking machine	3	25
1041	Carry out road marking operations using a mechanical road painting machine	3	16
1042	Carry out road construction and maintenance activities using a milling machine	3	10

Optional Strand – Further skill development

A minimum of 18 credits is required from the following unit standards.

Domain: Road Construction and Maintenance – Machine Operations

Unit No.	Unit Standard Title	Level	Credit
819	Carry out road construction and maintenance activities using a mowing tractor	2	10
1018	Carry out road construction and maintenance activities using a rotary broom	2	8
1045	Operate paint truck for carrying out road marking activities	2	8

3 credit recognition and transfer arrangements

Credits for any version of a unit standard with the same identification number will be recognised in the award of this qualification.

4 special arrangements

- 4.1** Special Arrangements apply to the accreditation of providers offering learning pathways to and/or undertaking assessments relating to all unit standards listed in this qualification under the Subfield of Roads Construction and Maintenance. These Special Arrangements are available from:

Roads Technical Training Unit (RTTU)
Private Bag 12030
Windhoek
Namibia
Telephone number: 061-227818
Facsimile number: 061-227818

- 4.2** Special Arrangements may apply to the accreditation of providers offering learning pathways to and/or undertaking assessment relating to all unit standards listed in this qualification in other Subfields and Domains. These Special Arrangements are available from:

Namibia Qualifications Authority
44 Bismarck St.
Windhoek
Namibia
Telephone number: 061-384116
Facsimile number: 061-384114
Email: info@namqa.org

Namibia Training Authority
Rand Street
Khomasdal
Namibia
Telephone number: 061-27 9550
Facsimile number: 061-27 9551
Email: info@nta.com.na

- 4.3** Regardless of the above, providers seeking accreditation through the relevant authorities must have or have confirmed access to all equipment and facilities detailed in the Special Notes, Performance Criteria and/or Range Statements in the unit standards that are included in this qualification.

5 transition arrangements

5.1 non National Qualifications Framework transition

None.

5.2 National Qualifications Framework transition

This is the first version of this qualification.