



# NATIONAL CERTIFICATE: CONSTRUCTION ROADWORKS

## NQF



3

## SAQA



24173

## TRAINING DAYS



21

## DURATION



12 months

## CREDITS



155

## SETA



CETA

## AVAILABLE DELIVERY METHODOLOGY

### Online



This course is not available online.

### Instructor Led



100% Trainer led methodology in order for learners to achieve applied competence

### Blended



Variety of learning methodologies used for learners to achieve applied competence

## PURPOSE

This qualification is for persons who work or intend to work within a construction context on a site, and who seek recognition for essential skills in construction operations in roadworks.

### Rules regarding Fundamental, Core and Electives:

- Fundamental unit standards totaling 56 credits.
- Core unit standards totaling 64 credits.
- Elective unit standards totaling a minimum of 35 credits.

## ENTRY CRITERIA

- General communication skills should be at a higher level or equal to Grade 10.
- English skills should be at a higher or equal to Grade 9.
- Mathematical literacy should be equal to Grade 10.
- Basic knowledge of construction works.
- Safe work practices on a construction site.
- Work effectively as part of a team.

## SKILLS OUTCOMES

### Core exit level outcomes:

- Establish health and safety to a work area in a road construction environment.
- Establish and prepare a work area in a road construction environment.
- Maintain records for civil construction sites in a road construction environment.
- Calculate construction quantities to develop a work plan for road construction.
- Render basic first aid in a construction site.
- Procure materials, tools and equipment in a road construction environment.
- Read and interpret construction drawing and specifications in a road construction environment.
- Interpret the composition, construction sequence and processes of the construction industry.
- Apply process control testing procedures in a road construction environment.
- Handle, transport, store, utilise hazardous materials on a civil construction site.
- Work in confined spaces on a construction site (roadwork environment).
- Identify, describe and use material in civil engineering construction.
- Implement roadside safety procedures.

### Fundamental exit level outcomes:

- Show a critical awareness of language usage in the road construction environment.
- Analyse and present information in a road construction environment.
- Communicate appropriately in a road construction environment.
- Use mathematics in the road construction industry. (calculate quantities, set out work).
- Use mathematics to investigate and monitor financial aspects of personal and business issues.
- Investigate life and work related problems using data and probabilities - in a road construction environment.

### Elective exit level outcomes:

- Set out control point for marking barrier lines and islands.
- Set out control points for marking symbols.
- Set out control point for centre line and edge line marking for road marking.
- Setting out pipes, culverts and transferring levels.
- Organize and control the compaction of hot mix asphalt.
- Conduct a bituminous seal operation.
- Install road studs.
- Construct pre-cast kerbs and concrete channels on a roadworks construction site.
- Develop and use keyboard skills to enter data.
- Erect and maintain guardrails.
- Install pre-cast concrete pipes.
- Maintain and repair bituminous road surfaces.

For more information on how your organisation can benefit, contact Training Force:



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# CONSTRUCTION

## Elective exit level outcomes: Continued

- Install manhole chambers on a civil construction site.
- Erect Directional Signs - Overhead < 10 m2.
- Erect Directional Signs - Ground < 10 m2.
- Organize the erection of sign posts.
- Erect fencing.
- Erect palisade fencing.
- Install road markers.
- Operate a personal computer system.
- Operate mechanical painting machine for remarking.
- Organise the erection of signposts.
- Repair/replace minor structures.
- Organize and control the spray of bitumen on road surfaces.

## MARKET INFORMATION

**Target Market: Engineers :** Road work Supervisors • Foreman & Civil Engineering technical personnel who supervise road work construction.

**Target Industries:** Construction companies • Municipalities

## RESOURCE REQUIREMENTS

PPE • First Aid consumables • Small plant equipment. Depending on electives chosen: bitumen, concrete, road marking equipment, guard rails, fencing.

## GENERAL INFORMATION

Credit Accumulation Transfer (CAT): CAT exemption is only applicable to approved learners. Approved learners will have reduced contact days. Learners who do not meet with CAT requirements will need to complete all Clusters in full.

FISA Requirements: Final Integrated Summative Assessment is a requirement for the successful completion of this learnership.

Recognition of Prior Learning: RPL is not available for this qualification.

**Cluster 1 Part 1 - Communication Skills - Credit Accumulation Transfer is applicable to the unit standards below:**

Outcome	SAQA ID	Name of Unit Standard	Credits
Fundamental	8963	Access and use of information from texts.	5
Fundamental	8962	Maintain and adapt oral communications.	5
Fundamental	8967	Use language and communication in occupational learning programmes.	5
Fundamental	8964	Write for a defined context.	5

Recommended training days for Cluster 1 Part 1 is 3 days.



# CONSTRUCTION

**Cluster 1 Part 2 - Communication Skills - Credit Accumulation Transfer is applicable to the unit standards below:**

Outcome	SAQA ID	Name of Unit Standard	Credits
Fundamental	8968	Accommodate audience and context needs in oral communication.	5
Fundamental	8969	Interpret and use information from texts.	5
Fundamental	8973	Use language and communication in occupational learning programmes.	5
Fundamental	8970	Write texts for a range of communicative contexts.	5

Recommended training days for Cluster 1 Part 2 is 3 days.

**Cluster 2 - Mathematical Skills - Credit Accumulation Transfer is applicable to the unit standards below:**

Outcome	SAQA ID	Name of Unit Standard	Credits
Fundamental	9010	Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations.	2
Fundamental	9013	Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts.	4
Fundamental	9012	Investigate life and work-related problems using data and probabilities.	5
Fundamental	7456	Use mathematics to investigate and monitor the financial aspects of personal, business and national issues.	5

Recommended training days for Cluster 2 is 3 days.

**Cluster 3 - Health and Safety**

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	9964	Apply health and safety to a work area.	3
Core	9986	Apply quality principles on a construction site.	12
Core	14560	Handle, transport, store and utilize hazardous materials on a civil construction site.	5
Core	14561	Implement roadside safety procedures.	2
Core	9965	Render basic first aid.	3

Recommended training days for Cluster 3 is 5 days.



# CONSTRUCTION

## Cluster 4 - Administration and Planning

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	9966	Establish and prepare a work area.	4
Core	13972	Identify describe and use materials in civil engineering construction.	4
Core	14336	Maintain records on a construction site.	2
Core	15034	Work in confined spaces on construction sites.	2

Recommended training days for Cluster 4 is 2 days.

## Cluster 5 - Understanding of Construction Industry

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	9962	Calculate construction quantities to develop a work plan.	8
Core	110095	Interpret the composition, construction sequence and processes of the construction industry.	3
Core	9968	Procure materials, tools and equipment.	6
Core	14580	Read and interpret construction drawings and specifications.	10

Recommended training days for Cluster 5 is 5 days.

## Cluster 6 - Elective options (Choose unit standards to the value of a minimum of 35 Credits)

Outcome	SAQA ID	Name of Unit Standard	Credits
Elective	14555	Conduct a bituminous seal operation.	5
Elective	13958	Maintain and repair bituminous road surfaces.	8
Elective	12908	Set out control point for centre line and edge line marking for road marking.	5
Elective	14575	Construct precast kerbs and concrete channels on a roadworks construction site.	5
Elective	114218	Demonstrate an understanding and implement environmental initiatives on a construction project.	6
Elective	15185	Organise and control the spraying of bitumen on road surfaces.	5

Recommended training days is dependent on the electives chosen, with a minimum of 5 days recommended.