



Accredited Provider
The Skills College for Development and Training (Pty)Ltd.

National Certificate: Supervision of Construction Processes

Qualification ID 49053– NQF 4; 176 Credits

INTRODUCTION

Learners found competent against this Qualification will be able to execute the supervision of construction processes, with specialisation in a specific context.

For those with extensive experience in the workplace, this Qualification can be used in the recognition of prior learning process to assess and recognise workplace skills acquired without the benefit of formal education and training.

For the new entrant, this Qualification describes the learning outcomes required to effectively participate in a structured workplace.

For education and training providers, this Qualification provides guidance for the development of appropriate learning programmes and assessment documentation.

For employers, this Qualification enables skills gaps to be identified and addressed ensuring that productivity levels are increased and business objectives achieved.

This Qualification has been developed to provide flexibility and mobility / portability across the construction industry. This will allow for future career advancement across the various learnerships in the supervision of construction processes..

Rationale for the qualification:

The rationale for the introduction of a Unit Standard based Qualification - "National Certificate in the Supervision of Construction Processes -NQF Level 4 ", is to provide a qualification for persons supervising the use of construction resources and construction work processes. Typical job roles would include foreman, general foreman, and superintendent.

The Qualification reflects the skills, knowledge, and understanding required to be an effective supervisor in the Construction Industry, whether in micro, small, medium, or large operations.

The Qualification consists of generic supervisory competencies, generic technical competencies, as well as "supervisory technical expertise" required in a specific context. The latter reflects the technical working knowledge and skills required to supervise a specific area of activity. The various areas of supervision are reflected in the Elective component of the qualification.

The meaningful grouping of electives as proposed in annexure C - rules of combination - implemented via proposed fields of learning - will give the learner contextualised expertise in a specific area of specialisation as indicated in the fields of learning.

The Qualification will serve as a basis for learning towards the National Diploma in the Management of Construction Processes - NQF Level 5.

Its contribution to socio-economic transformation is that learners would be able to undergo RPL-assessment and thereby receive recognition for previous learning and experience. The employability and career prospects of learners can therefore be enhanced by this Qualification.

Previously disadvantaged individuals with this Qualification can take a supervisory role in Industry - a process that will accelerate economic transformation and give economic empowerment.

The benefits to the economy is that quality supervision in the Construction Industry will result in improved productivity, quality, safety and cost efficiency - thus improving service delivery of infrastructure.

LEARNING ASSUMED TO BE IN PLACE

Learners should have acquired the language competencies of NQF level 3 and mathematical literacy competencies of NQF Level 3, prior to embarking on learning towards this Qualification.

Recognition of Prior Learning:

The Qualification may be obtained through the process of Recognition of Prior Learning (RPL). Learners who have met the requirements of any Unit Standard in this Qualification may apply for recognition of prior learning to the relevant Education and Training Quality Assurance Body (ETQA), and will be assessed against the assessment criteria and specific outcomes for the relevant Unit Standard/s. ETQA bodies are responsible to facilitate the implementation of the RPL. The ETQA body registers trained assessors against specific Unit Standards. Learners are prepared for assessment and assessed against the Unit Standard by these registered assessors. Moderation and also an appeals process are in place. Learners declared competent against a specific Unit Standard, receives an ETQA certificate indicating this achievement. This information is also recorded on the National Record Learner Database (NLRD).

EXIT LEVEL OUTCOMES

On completion of this Qualification learners are able to demonstrate and apply the following generic competences:

1. Demonstrate knowledge and application of occupational health and safety specifically applicable to construction supervision.
2. Knowledge of construction material procurement.
3. Show knowledge of environmental protection.
4. Demonstrate knowledge of quality control and improvements in a construction environment.
5. Calculate quantities to develop a work plan.
6. Display knowledge of productivity control and improvements.
7. Display team leadership.
8. Read and interpret drawings according to project specifications and Industry norms.

Elective exit level outcomes and assessment criteria for the different proposed fields of learning are as follows:

1. General Supervision - Civil Engineering
Demonstrate the competence to supervise general Civil Engineering Construction Works

2. General Structures Learning Field:

Demonstrate the competence to supervise general structural construction processes.

3. Concreting Specialised Learning Field:

Demonstrate the competence to supervise specialised concreting.

4. Concreting Pre-cast Learning Field:

Demonstrate the competence to supervise Pre-cast concreting.

5. Concrete reinforcing Learning Field:

Demonstrate the competence to supervise general concrete reinforcing.

6. Access Scaffolding Learning Field:

Demonstrate the competence to supervise access scaffolding:

7. Load Bearing Scaffolding Learning Field:

Demonstrate the competence to supervise Load Bearing scaffolding:

8. Suspended Scaffolding Learning Field:

Demonstrate the competence to supervise suspended scaffolding:

9. Formwork Learning Field:

Demonstrate the competence to supervise the fabrication and erection of formwork.

10. Jacking Learning Field:

Demonstrate the competence to supervise jacking operations.

11. Structural steel erecting Learning Field:

Demonstrate the competence to supervise structural steel erecting.

12. Structural Steel Maintenance Learning Field:

Demonstrate the competence to supervise structural steel maintenance.

13. Piling Learning Field:

Demonstrate the competence to supervise piling operations.

14. Road and Rail Formation Learning Field:

Demonstrate the competence to supervise the construction of rail formation.

15. Bulk Earthworks Learning Field:

Demonstrate the competence to supervise the construction of bulk Earthworks.

16. Surface Drainage Learning Field:

Demonstrate the competence to supervise the construction of surface drainage structures.

17. Layer-works Learning Field:

Demonstrate the competence to supervise the construction of layer-works.

18. Labour Intensive Roads and Storm water Construction Learning Field:

Demonstrate the competence to supervise the construction of roads and storm water with labour intensive techniques.

19. Labour Intensive Water and Sanitation construction Learning Field:

Demonstrate the competence to supervise the construction of water and sanitation services with labour intensive construction techniques.

20. Labour Intensive Structural construction, repair, and maintenance Learning Field:

Demonstrate the competence to supervise the construction of structures, repair work, and maintenance with labour intensive techniques.

21. Roadworks- Bituminous Construction: Learning Field:

Demonstrate the competence to supervise the construction of road works with a bituminous surface.

22. Roadworks - Cementitious Construction Learning Field:

Demonstrate the competence to supervise the construction of road works with a cementitious surface.

23. Roadworks - Maintenance Learning Field:

Demonstrate the competence to supervise the maintenance of roads.

24. Water and Waste Water Learning Field:

Demonstrate the competence to supervise the construction of water and waste water services including maintenance.

25. Building Construction Learning Field:

Demonstrate the competence to supervise the construction of buildings.

26. Plant Operator Learning Field:

Demonstrate the competence to supervise the use of plant in Civil Engineering construction processes.

TIME PERIOD

This Learnership can be presented over a period of 12 months

A SELECTION OF THE FOLLOWING UNIT STANDARDS WILL BE COMPLETED IN ORDER TO REACH 176 CREDITS:

UNIT STANDARDS:

UNIT STANDARDS:

	ID	UNIT STANDARD TITLE	PRE-2009 NQF LEVEL	NQF LEVEL	CREDITS
Core	9982	Comply with legal requirements for a construction contract	Level 2	NQF Level 02	8
Core	14414	Calculate construction quantities and develop a work plan	Level 4	NQF Level 04	8
Core	114218	Demonstrate an understanding and implement environmental initiatives on a construction project	Level 4	NQF Level 04	6
Core	14415	Describe and interpret the composition, role-players, processes and role of the construction industry	Level 4	NQF Level 04	4
Core	14416	Implement a quality management system, project quality plan and a quality improvement process on a construction project	Level 4	NQF Level 04	10
Core	14417	Lead and supervise construction teams	Level 4	NQF Level 04	8
Core	14418	Monitor and control cost and production of construction work activities and implement productivity improvements	Level 4	NQF Level 04	12
Core	14425	Perform site administration functions	Level 4	NQF Level 04	10
Core	14426	Read, interpret and use construction drawings and specifications	Level 4	NQF Level 04	10
Core	14429	Supervise health and safety on a construction project	Level 4	NQF Level 04	6
Core	14430	Supervise the procurement, use and storage of construction materials	Level 4	NQF Level 04	10

Core	15137	Apply contract documentation	Level 5	Level TBA: Pre-2009 was L5	10
Fundamental	7572	Demonstrate knowledge of and produce computer spreadsheets using basic functions	Level 2	NQF Level 02	3
Fundamental	7568	Demonstrate knowledge of and produce word processing documents using basic functions	Level 2	NQF Level 02	3
Fundamental	8968	Accommodate audience and context needs in oral communication	Level 3	NQF Level 03	5
Fundamental	8969	Interpret and use information from texts	Level 3	NQF Level 03	5
Fundamental	8973	Use language and communication in occupational learning programmes	Level 3	NQF Level 03	5
Fundamental	8970	Write texts for a range of communicative contexts	Level 3	NQF Level 03	5
Fundamental	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	Level 4	NQF Level 04	6
Fundamental	8974	Engage in sustained oral communication and evaluate spoken texts	Level 4	NQF Level 04	5
Fundamental	12417	Measure, estimate & calculate physical quantities & explore, critique & prove geometrical relationships in 2 and 3 dimensional space in the life and workplace of adult with increasing responsibilities	Level 4	NQF Level 04	4
Fundamental	8975	Read analyse and respond to a variety of texts	Level 4	NQF Level 04	5
Fundamental	8979	Use language and communication in occupational learning programmes	Level 4	NQF Level 04	5
Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	NQF Level 04	6
Fundamental	8976	Write for a wide range of contexts	Level 4	NQF Level 04	5
Elective	13972	Identify describe and use materials in civil engineering construction	Level 2	NQF Level 02	4
Elective	116577	Finish off and hand over structural works	Level 3	NQF Level 03	12
Elective	116622	Lift and position loads	Level 3	NQF Level 03	12
Elective	116574	Assess appearance, durability and strength of precast elements	Level 4	NQF Level 04	5
Elective	116571	Carry out routine tests on raw materials for concrete production	Level 4	NQF Level 04	10
Elective	116680	Conduct specialist sealing and repairs to concrete	Level 4	NQF Level 04	10
Elective	116572	Control concrete material quality	Level 4	NQF Level 04	5
Elective	116591	Demonstrate an understanding of and adjust concrete mix design	Level 4	NQF Level 04	5
Elective	116563	Demonstrate knowledge and apply concrete materials technology	Level 4	NQF Level 04	10
Elective	15183	Demonstrate knowledge of concrete construction technology	Level 4	NQF Level 04	10
Elective	15168	Implement labour intensive construction systems and techniques	Level 4	NQF Level 04	12
Elective	263205	Inspect access scaffolding	Level 4	NQF Level 04	6
Elective	116556	Interpret and apply reinforcing drawings	Level 4	NQF Level 04	5

Elective	15172	Interpret test/lab results in civil construction	Level 4	NQF Level 04	4
Elective	14419	Organise and control finishing carpentry activities	Level 4	NQF Level 04	6
Elective	15171	Organise and control general road finishing activities	Level 4	NQF Level 04	6
Elective	14420	Organise and control masonry activities	Level 4	NQF Level 04	6
Elective	14421	Organise and control paving activities	Level 4	NQF Level 04	6
Elective	14422	Organise and control plumbing activities	Level 4	NQF Level 04	6
Elective	14423	Organise and control roof carpentry activities	Level 4	NQF Level 04	6
Elective	15174	Organise and control the construction of concrete pave wearing courses	Level 4	NQF Level 04	5
Elective	15179	Organise and control the installation of concrete segmented paving blocks	Level 4	NQF Level 04	5
Elective	15180	Organise and control the installation of jacked pipes	Level 4	NQF Level 04	8
Elective	15185	Organise and control the spraying of bitumen on road surfaces	Level 4	NQF Level 04	5
Elective	14424	Organise and control tiling and plastering activities	Level 4	NQF Level 04	5
Elective	15167	Organize and control concreting activities	Level 4	NQF Level 04	20
Elective	15187	Organize and control general road maintenance activities	Level 4	NQF Level 04	20
Elective	15189	Organize and control road rehabilitation by milling	Level 4	NQF Level 04	4
Elective	15169	Organize and control the construction of bulk earthworks	Level 4	NQF Level 04	12
Elective	15170	Organize and control the utilization of plant and equipment in civil engineering construction	Level 4	NQF Level 04	12
Elective	116564	Oversee concrete production	Level 4	NQF Level 04	5
Elective	116561	Oversee instantly de-moulded pre cast concrete element production	Level 4	NQF Level 04	5
Elective	116558	Oversee pre cast concrete production - wet mix	Level 4	NQF Level 04	5
Elective	116580	Oversee spun pre cast concrete element production	Level 4	NQF Level 04	5
Elective	116583	Perform tandem lifting	Level 4	NQF Level 04	12
Elective	116615	Plan and prepare for the erection of structural steelwork	Level 4	NQF Level 04	16
Elective	15195	Plan organize and control the installation of drainage structures for stormwater flow	Level 4	NQF Level 04	10
Elective	116686	Plan, organise and control piling operations	Level 4	NQF Level 04	20
Elective	116689	Plan, organise and control pre - cast concrete manufacturing processes	Level 4	NQF Level 04	10
Elective	15175	Plan, organise and control the construction of stabilized and unstabilized pavement layers	Level 4	NQF Level 04	12
Elective	116692	Plan, organise and control the erection, alteration/repositioning and dismantling of access scaffolding	Level 4	NQF Level 04	12

Elective	116691	Plan, organise and control the erection, alteration/repositioning and dismantling of load bearing scaffolding	Level 4	NQF Level 04	12
Elective	116690	Plan, organise and control the erection, alteration/repositioning and dismantling of suspended scaffolding	Level 4	NQF Level 04	18
Elective	116685	Plan, organise and control the fabrication and erection of formwork	Level 4	NQF Level 04	20
Elective	15177	Plan, organise and control the installation of Armco pipes	Level 4	NQF Level 04	8
Elective	15184	Plan, organise and control the installation of pressure and gravity drainage pipes	Level 4	NQF Level 04	8
Elective	116688	Plan, organise and control the jacking of concrete structures	Level 4	NQF Level 04	20
Elective	116683	Plan, organise and control the maintenance of steel structures	Level 4	NQF Level 04	8
Elective	15186	Plan, organise and control the maintenance of gravity drainage structures	Level 4	NQF Level 04	5
Elective	15188	Plan, organise and control the maintenance of pressure pipelines	Level 4	NQF Level 04	8
Elective	116693	Plan, organize and control reinforcing site activities	Level 4	NQF Level 04	25
Elective	116694	Plan, organize and control reinforcing workshop activities	Level 4	NQF Level 04	20
Elective	14428	Set out construction work areas	Level 4	NQF Level 04	10
Elective	116579	Supervise the installation of precast concrete elements	Level 4	NQF Level 04	8
Elective	116581	Supervise under water concreting	Level 4	NQF Level 04	4
Elective	116592	Tension bonded tendons	Level 4	NQF Level 04	10
Elective	116593	Tension unbonded tendons	Level 4	NQF Level 04	10
Elective	15165	Use labour intensive construction methods to construct and maintain roads and stormwater drainage	Level 4	NQF Level 04	8
Elective	15159	Use labour intensive construction methods to construct and maintain water and sanitation services	Level 4	NQF Level 04	8
Elective	15166	Use labour intensive construction methods to construct, repair and maintain structures	Level 4	NQF Level 04	8
Elective	15161	Initiate testing and interpret test/lab results in civil construction	Level 5	Level TBA: Pre-2009 was L5	4
Elective	15181	Organise and control a binder manufacturing process	Level 5	Level TBA: Pre-2009 was L5	10
Elective	15178	Organise and control a hot mix asphalt manufacturing process	Level 5	Level TBA: Pre-2009 was L5	10
Elective	15190	Plan, organise and control asphalt paving construction	Level 5	Level TBA: Pre-2009 was L5	15
Elective	15192	Plan, organise and control bituminous surfacing seal construction	Level 5	Level TBA: Pre-2009 was L5	15