



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

National Certificate: Environmental Practice

Qualification ID49605– NQF 2; 128 Credits

INTRODUCTION

Purpose:

This qualification is the second in a learning pathway for practitioners in the field of environmental science, environmental management and waste management. This series of qualifications will equip practitioners with the skills, knowledge and values to contribute towards the wise and effective use and management of our built environment, natural resources and ecological systems.

The specific purpose of this qualification represents the skills, knowledge and values required by competent practitioners to:

Operate and maintain machinery and equipment and use resources in an environmentally responsible manner

Apply basic principles and tools of environmental practice to avoid, minimise or remedy negative environmental impacts

With this understanding, practitioners will be able to engage productively and responsibly in work, individual or community related activities in the field of environmental science, environmental management and waste management. This qualification will also serve as a basis for further learning, and will equip learners with the knowledge, skills and values to participate meaningfully in society and contribute towards developing sustainable communities.

This qualification is applicable to a range of contexts within the field of environmental science, environmental management and waste management, such as local government, public and private waste management enterprises, cultural or natural heritage sites, community projects, recycling and recovery of resources, control and eradication of invasive and alien species, rural development and site preparation or rehabilitation. It is also suitable for workers with environmental functions in a range of industries such as mining, chemicals or manufacturing. The following are typical contexts in which this qualification can be assessed:

Waste management related activities, eg

- > Materials recovery and buy-back centres
- > Waste reception
- > Landfill operations

Water course cleaning, care and maintenance

Care of public places, open areas, cultural and natural heritage sites

Maintenance of parks and sports fields

Community projects and job creation schemes relating to environmental practice

General industrial, extraction, ie activities with an environmental care or improvement focus

Rationale:

South Africa has a need to manage and protect its natural resources and ecological systems, while simultaneously using its resources in a sustainable manner to promote social, physical and economic development.

People as individuals, and as members of social or workplace communities, need to become aware of their responsibilities towards the environment and to be empowered to make informed choices regarding their own activities and the impact that these activities have on the environment. There is also a need for people to develop practices which will ensure that their activities, individually and collectively, result in the sustainable use of resources and minimal negative impact on the environment.

Recent developments in environmental legislation have resulted in an increased demand for practitioners with the necessary skills, knowledge and values to fulfil these legislative requirements. Such practitioners - as learners, as workers and as members of social communities - need to be equipped to engage with the complexities and challenges which arise from this need to ensure that use of resources and development is socially, ecologically and economically sustainable.

This qualification will enable providers, assessors and learners to plan, implement and measure the outcomes of suitable learning programmes, or to recognize prior learning. It will recognise the skills, knowledge and values of learners who engage actively in activities relevant to the field of environmental science, environmental management and waste management. Such activities are necessary in order to develop a portfolio of evidence.

The qualification is suitable for learners who:

Have attended courses and then apply the knowledge gained to activities in a workplace or in a community, or

Are already workers and have acquired the skills and knowledge without attending formal courses, or

Are already active in the community and have acquired the skills and knowledge without attending formal courses, or

Participate in skills programmes and appropriate work experience or community work, or

Are part of a learnership programme which integrates structured learning and work experience, or

Acquire their learning through any combination of the above.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

It is assumed that the learner is competent in Communication and Mathematical literacy at NQF level 1.

Recognition of prior learning:

This qualification may be obtained through the process of RPL. The learner should be thoroughly briefed prior to the assessment and support should be provided to assist the learner in the process of developing a portfolio. While this is primarily a context-based qualification, evidence from other areas of endeavour may be introduced if pertinent to any of the Exit Level Outcomes.

EXIT LEVEL OUTCOMES

The Exit Level Outcomes for this qualification reflect a combination of Specific Outcomes and Critical Cross-Field Education and Training Outcomes. The way in which the Critical Cross-Field Outcomes have been advanced through the learning required for this qualification is embedded in the way in which the unit standards have been constructed. Critical Cross-Field Outcomes form the basis for acquiring skills, knowledge and values. The application of these in a specific context results in the achievement of Specific Outcomes. The integration of Specific Outcomes from a variety of unit standards results in the ability to achieve the Exit Level Outcomes.

1. Use simple, work-related machines and equipment in an environmentally efficient and effective manner.

Range: Simple, work-related machines and equipment include hand tools and mechanical machines, eg pneumatic compaction equipment, chain saws, bush cutters, static compaction equipment, weighing equipment, pumps, mixing equipment, shredding equipment, lifts, hoists, loaders, transport vehicles (inspection and basic maintenance only).

2. Participate as a member of a team or group to achieve work and environmental objectives.

Range: Group includes members of the public where applicable:

Environmental objectives includes reducing waste or energy consumption, carrying out repair and maintenance activities to remedy environmental impacts, etc.

3. Gather, compare and report data relating to environmental impacts.

Range: Data includes time periods, location, conditions before and after change, etc.

4. Use basic environmental tools in practical activities to prevent, correct or remedy environment impacts.

Range: Practical activities include broader activities such as rehabilitation projects and public participation. Using tools includes assess impact and evaluating the effect of interventions. Tools are appropriate to the level of qualification, eg risk assessment, environmental checklists, audit sheets, compliance sheets.

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 128 CREDITS:

UNIT STANDARDS:

	ID	UNIT STANDARD TITLE	PRE-2009 NQF LEVEL	NQF LEVEL	CREDITS
Core	119554	Apply environmental management tools to assess impacts	Level 2	NQF Level 02	5
Core	13217	Collect and use information	Level 2	NQF Level 02	5
Core	12461	Communicate at work	Level 2	NQF Level 02	5
Core	13220	Keep the work area safe and productive	Level 2	NQF Level 02	8
Core	116080	Monitor, collect and collate agricultural data	Level 2	NQF Level 02	2
Core	12036	Orientate self in the workplace	Level 2	NQF Level 02	6
Core	13258	Participate in work group activities	Level 2	NQF Level 02	4
Core	12483	Perform basic first aid	Level 2	NQF Level 02	4

Core	13221	Perform routine maintenance	Level 2	NQF Level 02	8
Core	119553	Take action to address impacts on the environment	Level 2	NQF Level 02	10
Core	119556	Use tools and operate equipment in an environmentally responsible manner	Level 2	NQF Level 02	10
Core	119558	Work with, use and care for materials and resources which can impact on health and the environment	Level 2	NQF Level 02	10
Fundamental	8963	Access and use information from texts	Level 2	NQF Level 02	5
Fundamental	9009	Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	NQF Level 02	3
Fundamental	7480	Demonstrate understanding of rational and irrational numbers and number systems	Level 2	NQF Level 02	3
Fundamental	9008	Identify, describe, compare, classify, explore shape and motion in 2-and 3-dimensional shapes in different contexts	Level 2	NQF Level 02	3
Fundamental	8962	Maintain and adapt oral communication	Level 2	NQF Level 02	5
Fundamental	12463	Understand and deal with HIV/AIDS	Level 2	NQF Level 02	3
Fundamental	8967	Use language and communication in occupational learning programmes	Level 2	NQF Level 02	5
Fundamental	7469	Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	NQF Level 02	2
Fundamental	9007	Work with a range of patterns and functions and solve problems	Level 2	NQF Level 02	5
Fundamental	8964	Write for a defined context	Level 2	NQF Level 02	5
Elective	14784	Apply sampling theory and practice in the chemical industry	Level 2	NQF Level 02	5
Elective	13202	Apply study and learning techniques	Level 2	NQF Level 02	3
Elective	116121	Apply sustainable farming practices to conserve the ecological environment	Level 2	NQF Level 02	5
Elective	113818	Clean and maintain area of responsibility	Level 2	NQF Level 02	8
Elective	14051	Collect and record data	Level 2	NQF Level 02	3
Elective	8330	Combat problem plants	Level 2	NQF Level 02	3

Elective	12334	Conduct water process laboratory tests	Level 2	NQF Level 02	6
Elective	13679	Control and extinguish a fire in a conservation area	Level 2	NQF Level 02	3
Elective	12351	Demonstrate An Ability To Work With Local Communities	Level 2	NQF Level 02	7
Elective	12352	Demonstrate knowledge of the roles and responsibilities of a community committee	Level 2	NQF Level 02	4
Elective	12033	Demonstrate knowledge of water cycle, water and wastewater systems and processes	Level 2	NQF Level 02	5
Elective	12465	Develop a learning plan and a portfolio for assessment	Level 2	NQF Level 02	6
Elective	11818	Investigate work opportunities in order to make a personal career/employment decision	Level 2	NQF Level 02	2
Elective	8346	Manage cultural heritage resources in the field	Level 2	NQF Level 02	2
Elective	116077	Monitor water quality	Level 2	NQF Level 02	3
Elective	119557	Operate waste disposal facilities	Level 2	NQF Level 02	6
Elective	12484	Perform basic fire fighting	Level 2	NQF Level 02	4
Elective	8332	Perform conservation guardianship	Level 2	NQF Level 02	8
Elective	116064	Recognise and identify the basic functions of the ecological environment	Level 2	NQF Level 02	4
Elective	119555	Separate, handle, store, treat and transport waste	Level 2	NQF Level 02	9
Elective	8348	Understand Nature Conservation issues	Level 2	NQF Level 02	4
Elective	10718	Use a personal budget to manage own money	Level 2	NQF Level 02	3