



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

## **National Certificate: Plant Production**

*Qualification ID 49009– NQF 4; 142 Credits*

### **INTRODUCTION**

This qualification has been developed for the fast food and restaurant industry. It brings together elements of food and drink preparation, service and supervision. This qualification will professionalise the industry and is applicable mainly to the fast food and restaurant sector, but would be transferable to another hospitality environment. The qualification provides articulation with Gaming, Travel and other Tourism industries.

### **PURPOSE AND RATIONALE OF THE QUALIFICATION**

The purpose of this qualification is to allow Supervisors to progress towards a Junior Farm Manager position with specific reference to Plant Production. The contextualised purpose and usage of the qualification is as follows:

A learner assessed against this qualification will have the necessary competence to manage Supervisors and working teams, performing the agricultural processes as applicable to Plant production in a range of Plant Production taking responsibility for the quality and quantity of outputs. The Learner will be able to take complete responsibility for her/his own actions and also take responsibility for supervising others at lower levels within an Plant Production context under broad guidance and evaluation.

Competency will be gained in any of the specialized sub-fields of Plant Production as specified under Areas Of Specialization (i.e. Vegetables, Fruit Production, Hydroponics, etc.) with a strong focus on management.

The learner will be able to take responsible decisions within a wide range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Plant Production context.

The Learner will be able to oversee the implementation of a wide range of procedures and will be able to ensure the relevant safety, quality, hygiene and technical standards as applicable within the industry.

In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

Finally, Learners will be able to guide and direct others in terms of the planning, implementation and control of development projects within a Plant Production context.

### **Rationale for the qualification:**

The range of typical learners that will enter this qualification will vary and includes:

Farm operators who wish to progress to the level of junior farm manager;

Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;

School leavers (Gr. 12) from agricultural schools; and

Learners may come from both genders.

The learner will engage in farm management and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

### **LEARNING ASSUMED TO BE IN PLACE**

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 2 and technical skills pertaining to agricultural activities equivalent to NQF 3.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

Should a new entrant into the industry wish to enter this learning programme, recognition will be given to all appropriate learning acquired through the schooling system.

In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

## **EXIT LEVEL OUTCOMES**

Exit Level Outcomes are divided into four categories of competencies, namely:

Fundamental Competencies

Agri-business

Good Agricultural Practices

Plant Production

Fundamental Competencies:

1. Apply communication skills in an agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Implement a data collection plan in the agricultural sector.
4. Plan and maintain environmentally sound agricultural processes by identifying knowledge processes and patterns of the environment in the region, and understanding the limitations of resources and how their management contributes to sustainable interactive agriculture, using environmental indicators.

Agri-business:

5. Manage stores and agro-inputs in stores.
6. Implement quality control aspects of an agribusiness.
7. Demonstrate ability to development of an integrated marketing plan.
8. Demonstrate the ability to develop an integrated whole farm budget.
9. Apply principles of human resources management in an agricultural environment.
10. Participate in the analysis, planning and management of an agri-business.
11. Describe the historical and current structure of the relevant industry within secondary agriculture.
12. Evaluate and adjust the enterprise and production processes of animal and crop enterprises.

Agricultural Practices:

13. Implement a management system related to food safety, production practices, as well as demonstrate environmental and social awareness within the agricultural supply chain.
14. Apply principles to design, prepare and implement basic operational procedures for the maintenance and storage of equipment, implements and infrastructure.
15. Implement corrective actions to ensure water quality.
16. Implement a natural resource management plan of the farm in relation to area wide planning.
17. Maintain the most appropriate land-use on a farm by continuously assessing the natural resource base.

Plant Production:

18. Explain the different physiological processes involved in the growth and development of the plant.
19. Establish and supervise the implementation of soil preparation procedures
20. Propagate plants in a variety of situations
21. Demonstrate an understanding of an integrated pest management system
22. Develop a harvesting plan for crops.
23. Implement a plant manipulation management plan using a broad range of techniques.

## **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 142 CREDITS:**

**UNIT STANDARDS:**

|      | <b>ID</b>              | <b>UNIT STANDARD TITLE</b>   | <b>PRE-2009<br/>NQF<br/>LEVEL</b> | <b>NQF<br/>LEVEL</b> | <b>CREDITS</b> |
|------|------------------------|--|-----------------------------------|----------------------|----------------|
| Core | <a href="#">116301</a> | Apply effective and responsible integrated pest, disease and weed control  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116302</a> | Assume co-responsibility and participation in human resource management  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116295</a> | Demonstrate a basic understanding of the physiological processes in plant growth and development                     | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116297</a> | Develop a harvesting plan for the specific agricultural crop   | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116290</a> | Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116293</a> | Evaluate, adjust and implement factors influencing agricultural enterprises  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116288</a> | Execute sustainable resource use and quality control   | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116286</a> | Give an overview of the industry structure   | Level 4                           | NQF Level 04         | 2              |
| Core | <a href="#">116278</a> | Implement a food safety and quality management system in the agricultural supply chain                               | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116303</a> | Implement a natural resource management plan   | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116309</a> | Implement integrated farm layout and site selection  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116311</a> | Implement soil fertility and plant nutrition practices   | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116305</a> | Manage plant manipulation methods of an agricultural crop  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116322</a> | Manage water quality parameters  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116291</a> | Participate in the development and management of an agri business plan   | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116684</a> | Participate in the development and management of an agricultural marketing plan                                      | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116319</a> | Prepare a whole farm budget and establish a proper integrated information system for an agri-business                | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116321</a> | Procure and manage agricultural input  | Level 4                           | NQF Level 04         | 3              |
| Core | <a href="#">116316</a> | Propagate plants in a variety of situations  | Level 4                           | NQF Level 04         | 3              |

|             |                        |  |         |              |   |
|-------------|------------------------|--|---------|--------------|---|
| Core        | <a href="#">116317</a> | Schedule the operation and maintenance of irrigation systems   | Level 4 | NQF Level 04 | 3 |
| Fundamental | <a href="#">8968</a>   | Accommodate audience and context needs in oral communication   | Level 3 | NQF Level 03 | 5 |
| Fundamental | <a href="#">8972</a>   | Interpret a variety of literary texts  | Level 3 | NQF Level 03 | 5 |
| Fundamental | <a href="#">8969</a>   | Interpret and use information from texts   | Level 3 | NQF Level 03 | 5 |
| Fundamental | <a href="#">8970</a>   | Write texts for a range of communicative contexts  | Level 3 | NQF Level 03 | 5 |
| Fundamental | <a href="#">9015</a>   | Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems  | Level 4 | NQF Level 04 | 6 |
| Fundamental | <a href="#">8974</a>   | Engage in sustained oral communication and evaluate spoken texts   | Level 4 | NQF Level 04 | 5 |
| Fundamental | <a href="#">116312</a> | Implement a data collection plan   | Level 4 | NQF Level 04 | 4 |
| Fundamental | <a href="#">12417</a>  | 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 | <a href="#">116320</a> | Plan and maintain environmentally sound agricultural processes   | Level 4 | NQF Level 04 | 8 |
| Fundamental | <a href="#">8975</a>   | Read analyse and respond to a variety of texts   | Level 4 | NQF Level 04 | 5 |
| Fundamental | <a href="#">8979</a>   | Use language and communication in occupational learning programmes   | Level 4 | NQF Level 04 | 5 |
| Fundamental | <a href="#">7468</a>   | Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues  | Level 4 | NQF Level 04 | 6 |
| Fundamental | <a href="#">8976</a>   | Write for a wide range of contexts   | Level 4 | NQF Level 04 | 5 |
| Elective    | <a href="#">116289</a> | Ensure sustainable wild flower harvesting operations   | Level 4 | NQF Level 04 | 5 |
| Elective    | <a href="#">116279</a> | Implement a permaculture site design   | Level 4 | NQF Level 04 | 7 |
| Elective    | <a href="#">116304</a> | Manage agricultural export logistics   | Level 4 | NQF Level 04 | 4 |
| Elective    | <a href="#">116306</a> | Manage organic certification and internal control systems  | Level 4 | NQF Level 04 | 5 |
| Elective    | <a href="#">116314</a> | Produce crop in a hydroponic system  | Level 4 | NQF Level 04 | 4 |
| Elective    | <a href="#">116315</a> | Recognise agri/ecotourism within the strategic environment   | Level 4 | NQF Level 04 | 5 |

