

Agrochemical & Crop Protection

1. Overview

This programme equips participants with the knowledge and practical skills to apply sustainable agricultural practices that protect the environment while supporting productive farming. Participants will gain an understanding of ecological systems, environmental conservation, responsible use of agrochemicals, pest and disease management, sustainable farming practices, and water quality monitoring. The programme promotes environmentally responsible decision-making and compliance with agricultural and environmental regulations.

2. Programme Outcome:

- Recognise and explain the basic functions of the ecological environment
- Identify environmental patterns, processes and natural resources that support sustainable agriculture
- Apply crop protection and animal health products safely, effectively and responsibly
- Respond appropriately to emergencies involving agrochemicals
- Identify common crop pests, diseases and weeds
- Apply appropriate pest, disease and weed control measures
- Apply sustainable farming practices that conserve natural resources
- Explain the importance of environmental conservation in agricultural production
- Implement practices that promote soil, water and biodiversity conservation
- Monitor and maintain agricultural water quality using established procedures
- Interpret water quality indicators and identify factors affecting water quality
- Apply environmental legislation and safe agricultural practices to support sustainable farming operations

Qualification:

Certificate of Completion

Duration:

4-Months

Programme Type:

Category B – Workplace-Based Learning Programme

Programme ID:

PA0387

SAQA US:

116064, 116125, 116124, 116121, 116077

NQF Level:

2

Credits:

26

Entry Requirements:

Communication at NQF Level 1

Training Options:

Online - Each participant will receive access to an online portal, where all programme materials and resources are available. Training is delivered fully online, and participants will join scheduled Microsoft Teams sessions facilitated by a trainer. This mode provides flexibility and allows learners to participate from any location.

Blended - Blended learning combines both online and face-to-face training. Participants receive access to an online portal for online content, resources, and self-paced activities. They also attend scheduled in-person contact sessions with a facilitator, either at the client's premises or providers campus. This approach offers the flexibility of online learning with the added support of guided, interactive sessions.

**A choice of leveraged programmes for any person,
At any level, in any department, of any company, in any industry.**

Face-to-Face - Each participant will receive training resources, which contains all programme materials and resources. Training is delivered through onsite contact sessions, either at the client's premises or providers campus, where a facilitator conducts the sessions in a classroom environment.

Minimum Participants Required: (1) Online, (1) Blended & (1) Face-to-Face

3. Programme Content

- **(116064 US):** Recognise and identify the basic functions of the ecological environment
- **(116125 US):** Apply crop protection and animal health products effectively and responsibly
- **(116124 US):** Control pests, diseases and weeds on all crops effectively and responsibly
- **(116121 US):** Apply sustainable farming practices to conserve the ecological environment
- **(116077 US):** Monitor water quality

4. Topics

Module 1: Ecological Environment and Sustainable Agriculture

- Introduction to ecosystems
- Ecological patterns and natural processes
- Environmental indicators
- Local natural resources
- Environmental functions in agriculture
- Sustainable agricultural production
- Responsible use of environmental resources
- Environmental stewardship

Module 2: Responsible Use of Crop Protection and Animal Health Products

- Introduction to agrochemicals
- Types of crop protection products
- Animal health products
- Safe handling, storage and transportation
- Personal Protective Equipment (PPE)
- Mixing and application techniques
- Environmental risks associated with agrochemicals
- Emergency response procedures
- Agricultural legislation and safety requirements

We trust that the above is in order and look forward to hearing from you for Implementation

Module 3: Pest, Disease and Weed Control

- Identification of common crop pests
- Recognition of plant diseases and symptoms
- Identification of common weeds
- Causes and spread of pests and diseases
- Integrated pest management principles
- Basic pest, disease and weed control methods
- Safe application of control measures
- Environmental considerations in pest management
- Record keeping and monitoring

Module 4: Sustainable Farming and Environmental Conservation

- Principles of sustainable agriculture
- Natural resource conservation
- Soil conservation practices
- Water conservation techniques
- Biodiversity protection
- Sustainable land management
- Environmental legislation
- Waste management in agriculture
- Conservation planning in farming operations

Module 5: Water Quality Monitoring

- Importance of water quality in agriculture
- Sources of water contamination
- Water quality indicators
- Water sampling techniques
- Monitoring procedures
- Maintaining water quality
- Corrective actions for poor water quality
- Record keeping and reporting
- Environmental best practices

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5. Assessments

This programme includes a Portfolio of Evidence (POE) that must be submitted at the end of the programme. The POE include:

- **Knowledge Assessments:** To evaluate theoretical understanding
- **Practical Assignments:** Hands-on tasks related to course topics
- **Workplace Assignments and Logbook:** Application of skills in real-world settings

Successful participants will receive a certificate of completion.

6. Workplace-Based Learning Programme

This WLP is a fusion of academic learning and practical work. The learning is directly applied to the workplace by using client-based mentors and extensive workplace-based portfolio work and assignments. Apart from the obvious benefits of a workplace directed qualification, each WLP qualifies for recognition as a Category B Skills Programme in the Learning Matrix of the Amended BEE codes, which allows for the salaries of participants to be recognized as part of the Skills Development Expenditure.

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