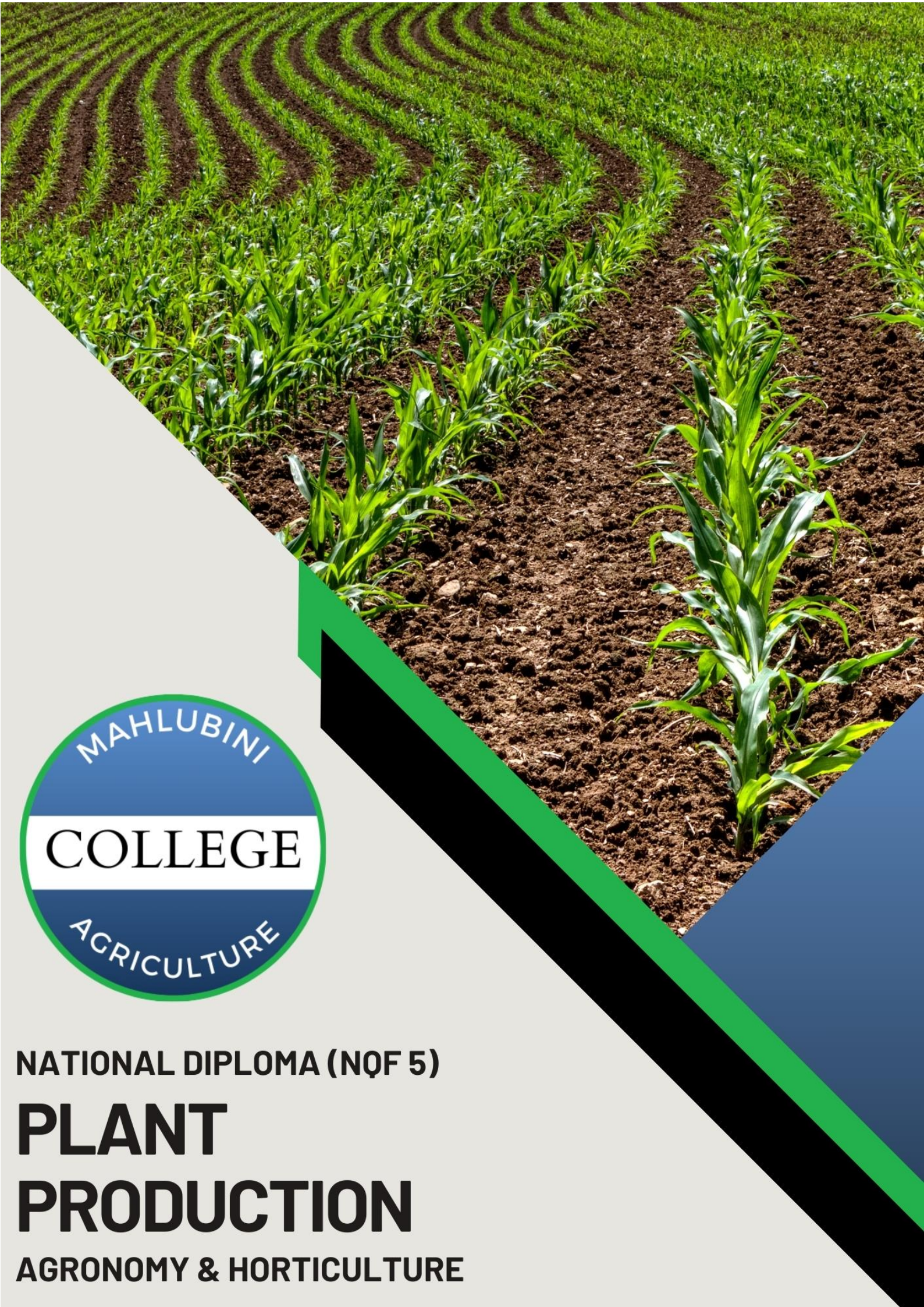




**NATIONAL DIPLOMA (NQF 5)**

# **PLANT PRODUCTION**

**AGRONOMY & HORTICULTURE**



# NATIONAL DIPLOMA PLANT PRODUCTION

## National Diploma: Plant Production | NQF 5, SAQA ID 49010

The National Diploma in Plant Production is an academic online programme supported by practical hands-on modules, developed for the sub-Saharan Africa Agronomy and Horticulture Industry.

The qualification focuses on the Management of Operational Agronomic- and Horticultural Production skills within the framework of the sciences of plant biology, regenerative and conservation production systems, agricultural economics and strategic and business management, supported by fundamental knowledge of the application of basic computer skills, communication, applied mathematics, agricultural engineering technology and chemistry & physics.

The two-year National Diploma in Plant Production will enable qualifying students to actively participate in primary crop and horticulture production, whilst enhancing the overall agrarian process and gaining opportunities to access local, national and international agricultural markets. Competency will be obtained in specialised sub-fields of Crop and Horticulture Production, depending on the client's specific requirements (i.e., summer grains, winter grains, vegetables, tropical fruits, sub-tropical fruits, nuts and dates, potatoes and sugarcane) with a strong focus on management and technical knowledge.

On completion, students will be well-positioned to extend learning and practice into other sub-fields such as Animal Production, Mixed Farming and Farm Management.

## WHAT YOU STUDY

### First Year modules

#### Semester 1

1. Introductory Modules (INDU110 & NATU110)
2. Basic Computer Skills (COMP110)
3. Communication Skills I (COMM114)
4. Applied Mathematics & Statistics I (MATH114)
5. Agricultural Science (AGSC110)
6. Agricultural Management & Economics I (AGMA114)
7. Plant Science I (PLNT114)
8. Agronomy and Horticulture I (AGHO114)



# NATIONAL DIPLOMA PLANT PRODUCTION

## Semester 2

1. Communication Skills II (COMM124)
2. Agri Engineering Technology I (ENGI124)
3. Agricultural Management & Economics I (AGMA124)
4. Pasture Science (PAST120)
5. Plant Science II (PLNT124)
6. Agronomy and Horticulture I (AGHO124)

## Second Year Modules Semester 1

1. Applied Mathematics & Statistics II (MATH215)
2. Pasture Science II (PAST210)
3. Plant Science II (PLNT215)
4. Agronomy and Horticulture II (AGHO215)

## Semester 2

1. Agricultural Management & Economics II (AGMA225)
2. Pasture Science II (PAST220)
3. Plant Science II (PLNT225)
4. Agronomy and Horticulture II (AGHO225)

## ADMISSION REQUIREMENTS

The following minimum admission requirements will be required to enter for the National Diploma:

- National Senior Certificate (Grade 12), or National Certificate (Vocational) that allows entrance to Diploma or Higher Certificate studies
- Minimum Application Point of 20
- English tuition language with a minimum achievement of Level 3 (40%)
- Mathematical Literacy with a minimum achievement of Level 4 (50%), or
- Mathematics with a minimum achievement of level 2 (30%)
- National Certificate: Plant Production, NQF 4

## CURRICULUM LAYOUT

### First-year:

### First Semester:



# NATIONAL DIPLOMA PLANT PRODUCTION

## **Introductory Modules**

- Introduction to Agripedia (INDU110)
- Nature of Thought (NATU110)

## **Module 1: Basic Computer Skills (COMP110)**

- Introduction to Computers
- Computer Components
- Operating Systems
- Electronic Communication
- Microsoft Office

## **Module 2: Communication Skills I (COMM114)**

- Accommodate audience and context needs in oral/signed communication
- Interpret a variety of literary texts
- Interpret and use information from texts
- Write texts for a range of communicative contexts

## **Module 3: Applied Mathematics & Statistics I (MATH114)**

- Conversions
- Quantities in Agriculture
- Circumference, Area, Volume & Distances
- 2 and 3 Dimensions
- Maps
- Data, Statistics & Probability in Agriculture
- Financial Mathematics

## **Module 4: Agricultural Sciences I (AGSC110)**

- Animal & Plant Biology
- Basic Chemistry
- Ecological Principles

## **Module 5: Agricultural Management & Economics I (AGMA114)**

- Farm Planning
- Introduction to Farm Management
- Human Resource Management
- Input Procurement, Purchasing & Stock Control

## **Module 6: Plant Sciences I (PLNT114)**

- Introduction to plant production
- Plant Propagation & Manipulation
- Plant Anatomy & Physiology



# NATIONAL DIPLOMA PLANT PRODUCTION

## **Module 7: Agronomy and Horticulture I (AGHO114)**

- Summer grains
- Vegetable crops

### **First-year:**

### **Second Semester:**

## **Module 1: Communication Skills II (COMM124)**

- Engage in sustained oral communication and evaluate spoken texts
- Read analyse and respond to a variety of texts
- Use language and communication in occupational learning programmes
- Write for a wide range of contexts

## **Module 2: Agri Engineering Technology I (ENGI124)**

- Energy
- Agricultural Safety
- Tools & Equipment
- Structural Materials & Construction Processes
- Irrigation & Water Supply
- Geographic Information Systems

## **Module 3: Agricultural Management & Economics I (AGMA124)**

- Farm Business Planning
- Financial Management
- Natural & Sustainable Resources
- Marketing

## **Module 4: Pasture Science I (PAST120)**

- Grazing Systems
- Grazing methods
- Soil fertility and pastures
- Manure as fertilizer
- Nutrient management

## **Module 5: Plant Science I (PLNT214)**

- Irrigation
- Advanced Crop Production
- Permaculture

## **Module 6: Agronomy and Horticulture I (AGHO124)**

- Winter grains
- Potatoes



# NATIONAL DIPLOMA PLANT PRODUCTION

## **Second year:**

### **First Semester:**

#### **Module 1: Applied Mathematics & Statistics II (MATH215)**

- Patterns, Sequences & Series
- Functions
- Complex Numbers

#### **Module 2: Pasture Science II (PAST210)**

- Calculate fertiliser rates
- Read fertiliser labels
- Water requirements
- Irrigation scheduling

#### **Module 3: Plant Science II (PLNT215)**

- Soil Science
- Principles of Agronomy
- Agro Chemicals & Chemical Application

#### **Module 4: Agronomy and Horticulture II (AGHO215)**

- Sub-tropical fruits
- Tropical fruits

## **Second Year:**

### **Second Semester:**

#### **Module 1: Agricultural Management & Economics II (AGMA225)**

- Business Ownership
- Operational Planning & Execution
- Production Management

#### **Module 2: Pasture Science II (PAST220)**

- Pasture forages
- Sowing and establishment
- Pest and diseases

#### **Module 3: Plant Science II (PLNT225)**

- Organic certification
- Plant breeding
- Anatomy and Physiology



# NATIONAL DIPLOMA PLANT PRODUCTION

## Module 4: Agronomy and Horticulture II (AGHO225)

- Nuts and Dates
- Sugarcane

## SKILLS AND JOB OPPORTUNITIES

You will develop, over the tenure of your studies, a critical understanding of modern agriculture in SubSahara Africa and working in a global economy. You will gain practical and relevant skills that will enable you to work in the agronomy and horticulture production sectors in South Africa.

All course content is based on and supported by the latest industry developments, and these best practices will allow you to participate meaningfully in primary crop production.

Graduates will be able to enter the primary agricultural workplace and establish a thriving career through hard work and commitment.

## METHODOLOGY

The National Diploma in Plant Production is presented as an exciting, blended offering through e-learn, online video conferences, and formal compulsory contact sessions on practical training offered by i3A and Industry Product specialists.

This is done through self-study, reading and the online submission of assignments. Assessment is done through formative and summative assignments.

This is a participatory learning programme, where the student will also be able to communicate with fellow students across southern Africa via Agri-social, our social media platform. This platform allows for questions to be discussed, and the opportunity to upload and share interesting articles, images, and videos. Throughout the academic year, lecturers will be available on the Agri-social platform. They are also readily accessible via email, SMS, WhatsApp, or direct telephonic contact.

Throughout the academic year, lecturers will be readily available and accessible through online video conference media, email and social media technology.

Theoretical studies are completed through our online Agri-learn platform and the student is provided with a practical logbook to achieve practical competencies and experiences in the student's workplace. Where needed, students will be assisted towards practical competence through our work placement programme to also submit a practical report on exposure and practical experience obtained.

## ACADEMIC FEES

The following academic fees are applicable for the 2025/2026 academic year:



# NATIONAL DIPLOMA PLANT PRODUCTION

## Full time residential students:

| Payment Structure 1:                  | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|---------------------------------------|--------------------------|-------------------------|
| At registration:                      | R 3 000                  | R 3 000                 |
| After Registration – Once off Payment | R 157 000                | R 157 000               |

| Payment Structure 2:                 | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|--------------------------------------|--------------------------|-------------------------|
| With registration:                   | R 3 000                  | R 3 000                 |
| After registration – First semester: | R 78 500                 | R 78 500                |
| Second semester:                     | R78 500                  | R 78 500                |

| Payment Structure 3:                      | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|-------------------------------------------|--------------------------|-------------------------|
| With registration:                        | R 3 000                  | R 3 000                 |
| After registration – 10x Monthly payments | R 15 700                 | R 15 700                |

## Day Students (Not living on campus on a permanent basis):

| Payment Structure 1:                  | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|---------------------------------------|--------------------------|-------------------------|
| At registration:                      | R 3 000                  | R 3 000                 |
| After Registration – Once off Payment | R 65 000                 | R 65 000                |

| Payment Structure 2:                 | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|--------------------------------------|--------------------------|-------------------------|
| With registration:                   | R 3 000                  | R 3 000                 |
| After registration – First semester: | R 31 000                 | R 31 000                |
| Second semester:                     | R31 000                  | R 31 000                |

| Payment Structure 3:                      | Year 1 (2025): R 160 000 | Year 2 (2026): R160 000 |
|-------------------------------------------|--------------------------|-------------------------|
| With registration:                        | R 3 000                  | R 3 000                 |
| After registration – 10x Monthly payments | R 6 200                  | R 6 200                 |



# NATIONAL DIPLOMA PLANT PRODUCTION

***Note: The costs for transport, meals and accommodation for possible practical training outside Bloemfontein are not included in the academic costs and will be discussed with students in advance as applicable for practical training.***

## ALTERNATIVE PAYMENT ARRANGEMENT:

If the student is not in a financial position to pay the full amount per semester, written application for the monthly payment of modules can be addressed to:

The financial Director : [admin@mahlubini.africa](mailto:admin@mahlubini.africa)

## WHY MAHLUBINI AGRICULTURE COLLEGE?

Situated in the vibrant town of Cofimvaba, Eastern Cape, Mahlubini College is excited to welcome you to our community of future agricultural leaders. We offer accredited NQF 4 and NQF 5 programmes designed to give you the skills and knowledge needed to succeed in the dynamic world of agriculture. Whether you're passionate about sustainable farming, innovation, or community development, Mahlubini College is the place where your journey begins.

Join us, and together, let's grow Africa's future!

## TO FIND OUT MORE:

[www.mahlubini.africa](http://www.mahlubini.africa)

051 444 0201

[info@mahlubini.co.za](mailto:info@mahlubini.co.za)

Powered By

