



With a specialisation in Animal Health

#### **COURSE OVERVIEW**

# National Diploma: Animal Production with a specialisation in Animal Health NQF 5, 240 Credits

The National Diploma in Animal Production with a specialisation in Animal Health is an academic online programme supported by practical hands-on modules, developed for the sub-Saharan Africa Livestock Industry.

The qualification focuses on the Management of Operational Animal Health and Biosecurity within the framework of the sciences of animal biology, nature conservation, regenerative production, 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 Animal Production with a specialisation in Animal Health will enable qualifying students to actively participate and gain knowledge in the MSD Livestock Health Industry.

Students will gain opportunities to access the Livestock Health Industry on Local, National and International levels.

Specific competency will be obtained in Livestock Diseases, Farm Biosecurity, prevention and treatment of diseases in all livestock species, with specialist knowledge of MSD Animal Health Products, based on the scientific knowledge and technical application of bacteriology, virology, protozoology, parasitology, toxicology, metabolic diseases, pharmacology, biosecurity, injuries and wound treatment and sales and services of MSD Animal Health Products.

On completion, students will be well positioned to extend learning and practice into other sub-fields such as animal production, crop 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. Animal Science I (ANIM114)
- 8. Animal Health & Biosecurity I (MSDH114)

#### Semester 2

- 1. Communication Skills II (COMM124)
- 2. Agri Engineering Technology (ENGI124)
- 3. Agricultural Management & Economics I (AGMA124)
- 4. Animal Science I (ANIM124)
- 5. Animal Health & Biosecurity I (MSDH124)



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### Second Year Modules Semester 1

- 1. Applied Mathematics & Statistics II (MATH215)
- 2. Animal Science II (ANIM215)
- 3. Animal Health & Biosecurity II (MSDH214)

#### Semester 2

- 1. Agricultural Management & Economics II (AGMA225)
- 2. Animal Science II (ANIM225)
- 3. Animal Health & Biosecurity II (MSDH224)

#### 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 level of 3 (40%).
- Mathematical Literacy with a minimum achievement level of 4 (50%); or
- Mathematics with a minimum achievement level of 2 (30%).
- National Certificate: Animal Production with a Specialisation in Animal Health, NQF 4

## **CURRICULUM LAYOUT**

# First-year: First Semester:

## **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



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## 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: Animal Sciences I (ANIM114)

- Classification & Nomenclature
- Genetics & Breeding
- Anatomy & Physiology

### Module 7: Animal Health & Biosecurity I (MSDH114)

- Introduction to Animal Diseases
- Bacteriology
- Virology
- Protozoology
- Parasitology

## 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



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## **Module 2: Agri Engineering Technology (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: Animal Science I (ANIM124)

- Animal Nutrition
- Predation Management

## Module 5: Animal Health & Biosecurity I (MSDH124)

- Injuries & Wound Treatment
- Toxicology (Poisonings): Prevention and Treatment
- Metabolic & Nutritional Deficiency Diseases in Farm Animals
- Introduction to Veterinary Pharmacology
- Biosecurity on the Farm
- A Good Farm Health Plan

## **Second year:**

#### **First Semester:**

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

- Patterns, Sequences & Series
- Functions
- Complex Numbers

## Module 2: Animal Science II (ANIM215)

Anatomy & Physiology

## Module 3: Animal Health & Biosecurity II (MSDH215)

- Sheep Health & Biosecurity
- Cattle Health & Biosecurity
- Pig Health & Biosecurity
- Poultry Health & Biosecurity
- Goat Health & Biosecurity



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# **Second Year: Second Semester:**

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

- Business Ownership
- Operational Planning & Execution
- Production Management

### Module 2: Animal Science II (ANIM225)

- Animal Health Regulations and Legislation
- Artificial Insemination

## Module 3: Animal Health & Biosecurity II (MSDH225)

- Horse Health and Biosecurity
- Dog Health and Biosecurity
- MSD practical workshop
- MSD customer sales and services

### **SKILLS AND JOB OPPORTUNITIES**

You will develop, over the tenure of your studies, a critical understanding of the MSD Animal Health Industry in Africa in the modern era and working in a global economy. You will gain practical and relevant skills that will enable you to work in the Livestock Health and Biosecurity production sectors in sub-Saharan Africa.

The academic content is based on and supported by the latest MSD Animal Health Industry developments, products and best practices that will allow you to participate meaningfully in Livestock Health Management.

Graduates will be able to enter the primary Livestock Health Industry and establish a thriving career through hard work and commitment.

## **METHODOLOGY**

This 2-year National Diploma with a specialisation in Animal Health 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 MSD Veterinarians, Pharmacologists and 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.



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

#### **ACADEMIC FEES**

The following academic fees are applicable for 2024/2025.

Methods of payment:	Year 1 (2024): R 30 000	Year 2 (2025): R 30 000
At registration:	R 2 000	R 2000
After registration: 50% deposit	R 14 000	R 14 000
At the start of the second term: (Outstanding balance)	R 14 000	R 14 000
10 Monthly Debit Order arrangement (R 2 000 registration still applicable) (R150/month debit order fee included)	R 2 950	R 2 950

#### Notes:

- A 5% discount is applicable for students who pay the full annual fee upfront.
- The cost of travelling, meals and accommodation for practical contact sessions will be at an additional cost to the student.

## ALTERNATIVE PAYMENT ARRANGEMENT

If you are not in a financial position to pay the full quarterly amount, you may apply in writing for the payment of modules on a monthly debit order basis. Please direct your application to The Financial Director, msd@i3a.africa

## WHY i3A/ MSD Animal Health Academy?

- Courses are SAQA accredited.
- World-class lectures and affiliated academics.
- Custom-designed online MSD Campus that includes e-learning modules and an online encyclopaedia for lifelong support.

## TO FIND OUT MORE

Website: www.msd.i3a.africa Email: info@msd.i3a.africa Tel: +27 (0)51 444 0201

