|  |
| --- |
| **National Vocational Certificate in Horticulture Hydroponics (Level 3)**  |

**Level of qualification: 3**

|  |  |  |
| --- | --- | --- |
|  | **Compulsory** | **Elective** |
| **Level 4 credits available** | **7** | **None** |
| **Level 3 credits available**  | **34** | **13** |
| **Level 2 credits available**  | **40** | **8** |
| **Level 1 credits available**  | **11** | **None** |
| **Minimum totals required** | **92** | **17** |

**TOTAL 109**

**Registration date:**

**Scheduled review date:**

**Body responsible for the qualification:** Namibia Training Authority - NTA

**Other bodies whose unit standards are included in the qualification:** None

# Purpose

This qualification recognises people who have the competencies required for performing agricultural tasks. It is awarded to people who have demonstrated the skills and knowledge required to work effectively in the agriculture industry, demonstrate knowledge in hydroponics, in particular: greenhouse technologies, media preparation, hydroponic irrigation, plant nutrition, cultivation practices inside the greenhouse, propagation of plants, manage pest & diseases, manage workforce, maintain records and market analysis. It also has the option to choose from electives to further advance agricultural skills.

The entry requirement is the National Vocational Certificate in Horticulture and Crop Husbandry Level 2 or prior work experience in similar fields or ordinary level 2 entry levels.

This qualification leads to the National Vocational Certificate in Agriculture (Level 4).

# Regulations for the qualification

Summary of qualification requirements

This qualification will be awarded to people who are credited with a minimum of 102 credits and have met the requirements of both the compulsory and elective sections.

Detailed qualification requirements

**Com**p**ulsory**

*All the unit standards listed below are required.*

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Horticulture

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: HYDR1 | Operate and maintain growing technology structures  | 3 | 3 |
| Unit ID: HYDR2 | Select and prepare media | 2 | 2 |
| Unit ID: HYDR3 | Coordinate hydroponic irrigation tasks | 3 | 5 |
| Unit ID: HYDR4 | Apply plant nutrition | 3 | 5 |
| Unit ID: HYDR5 | Care for plants in greenhouse and shade net | 3 | 4 |
| Unit ID: 1301 | Harvest fruit and vegetable crops | 2 | 3 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Plant Husbandry

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1306 | Control pests, diseases, disorders and weeds | 2 | 4 |
| Unit ID: 1309 | Demonstrate knowledge of the economic and social contribution of agronomic and horticulture industry in Namibia | 2 | 2 |
| Unit ID 1313 | Propagate plants  | 2 | 3 |
| Unit ID 1314 | Scout pests, diseases, disorders and weeds in crops | 2 | 3 |
| Unit ID 1322 | Demonstrate knowledge of crop physiology | 3 | 3 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Farm Business

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1335 | Maintain agricultural records  | 3 | 4 |
| Unit ID: FB1 | Prepare a basic farm enterprise plan | 4 | 7 |
| Unit ID: FB2 | Conduct Market Analysis | 3 | 3 |
| Unit ID: 1327  | Demonstrate an understanding of basic economic principles of farming | 2 | 4 |
| Unit ID: 1326 | Apply basic financial literacy skills for agri-business | 2 | 2 |

FIELD: Agriculture and Nature Conservation

Subfield: Farm Management

Domain: Computing fundamentals

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1156 | Apply fundamental computer literacy skills | 1 | 8 |

FIELD: Agriculture and Nature Conservation

Subfield: Farm Management

Domain: Operate machinery, tools and equipment

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1383 | Operate automated irrigation systems | 3 | 4 |
| Unit ID: 1381 | Use and maintain hand and power farm tools | 2 | 2 |
| Unit ID: FMI1 | Operate agricultural small production machinery and equipment | 2 | 3 |
| Unit ID: 1380 | Operate and maintain simple irrigation systems | 2 | 6 |

FIELD: Agriculture and Nature Conservation

Subfield: Core Health

Domain: First aid

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 843 | Provide basic first aid | 1 | 3 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Human Resource Management

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1330 | Use workplace English in agricultural operations | 2 | 2 |
| Unit ID: 1331  | Apply work ethics | 2 | 4 |
| Unit ID: 1332 | Coordinate workforce in agriculture | 3 | 3 |

**Electives sets**

*Minimum of 10 credits are required*.

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Horticulture

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1302  | Coordinate greenhouse crop production tasks | 3 | 5 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Post-harvest storage and handling

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1324 | Handle horticultural produce after harvest | 2 | 4 |
| Unit ID: 1325 | Perform storage and handling of horticultural products | 3 | 4 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Food Value Addition

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: FVA 01 | Preserve fresh produce through drying and concentration at cottage industry level  | 3 | 4 |

FIELD: Agriculture and Nature Conservation

Subfield: Agronomy and Horticulture

Domain: Farm Business

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: 1334 | Sell farm produce | 2 | 2 |

FIELD: Agriculture and Nature Conservation

Subfield: Farm Management

Domain: Numeracy skills

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Unit Standard Title** | **Level** | **Credit** |
| Unit ID: FNS2 | Perform basic estimations and calculations as part of agricultural operations | 2 | 2 |

# Credit recognition and transfer arrangements

Credits for any version of a unit standard of the same identification number will be recognised in the award of this qualification.

#  Special arrangements

## Providers seeking registration and/or accreditation to deliver this qualification must meet the following special arrangements.

4.1.1 This qualification will be offered to trainees **either** including a period of 6 months of **industrial/job attachment which is recommended to be split in 3 months attachment at a training centre to develop a Portfolio of Evidence (POE) and be mentored on site and 3 months in the industry for exposure**, ***or*** as an **apprenticeship scheme** of a duration determined and agreed upon by the employer and the training provider on a ratio of 70/30 (70% at workplace and 30% at training institution) basis.

**Industrial/job attachment** is defined as a period in a workplace setting where a trainee obtains structured practical experience in a specific occupation in order to complement competencies acquired during training at a technical vocational training provider (TVTP).

**Apprenticeship** refers to the system of work integrated learning, where an apprentice is employed by a company on contractual basis, earning a monthly salary, learning and working side-by-side with an experienced mentor. In this case the employer must be an NTA approved entity (company) to register apprentices and has to identify a suitable training provider to provide the apprentice with the opportunity to gain skills and knowledge from theoretical training.

Employers and training providers are encouraged to consult the **National Policy On Work-Integrated Learning (WIL) for Technical and Vocational Education and Training (TVET) Sector** for further details on WIL implementation.

4.1.2 Providers involved in the assessment of this qualification and the associated unit standards must comply with the national assessment framework for the TVET system up to and including level 5 of the National Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning periods. Assessment arrangements apply to all occupations and industries which are encompassed in the technical vocational education and training sector.

 Assessment for this Qualification can be based on Portfolio of evidence in conjunction with at least one final field outcome-based product evaluation.

4.1.3 Providers of this qualification and the associated unit standards must be registered and/or accredited.

4.1.4 Providers of this qualification and their associated unit standards must have access to all equipment and facilities detailed in the tools and equipment list of the relevant training program.

4.2 Competencies covered in this qualification may be assessed through Recognition of Prior Learning (RPL).

4.3 Further relevant information and documentation may be accessed through:

**Namibia Training Authority**

10 Rand Street

Khomasdal

Namibia

Telephone number: 061 207 8550

Facsimile number: 061 207 8551

# Transition arrangements

Non-National Qualifications Framework transition

None

National Qualifications Framework transition

This is the first version of this qualification.