

<b>National Vocational Certificate in Electrical Engineering (Electronics) (Level 4)</b>
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**NQF Level of qualification:** 4

**Total credits available:** 94

**Total credits required:** 94

	<b>Compulsory</b>	<b>Elective</b>
<b>Level 3 credits available</b>	<b>17</b>	-
<b>Level 4 credits available</b>	<b>71</b>	-
<b>Level 5 credits available</b>	<b>6</b>	-
<b>Minimum totals required</b>	<b>94</b>	-

**Registration date:** 29 November 2018

**Scheduled review date:** 2023

**Body responsible for the qualification:** Namibia Training Authority through the Mining Quarrying, Construction, Electricity, Gas, Water Supply and Sanitation Industry Skills Committee.

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

## 1 PURPOSE

This qualification recognises people who have the competencies required for working in the field of electronics. It is awarded to people who have demonstrated the skills and knowledge required to inspect, test, maintain and upgrade electronics systems, manage electronics projects, develop workplace standards, conduct training for personnel skills development, manage conflicts within the workplace.

They further have a good understanding of establishing a business as part of entrepreneurship operations, implement, control and monitor business operations, apply knowledge of intermediate mathematics in different context, apply advanced knowledge of engineering science and engineering drawing in different contexts.

The entry requirement for this qualification is a National Vocational Certificate in Electrical Engineering (Electronics) (Level 3) or equivalent qualification and the ability to demonstrate basic communication skills in the English language and numeracy.

## 2 REGULATIONS FOR THE QUALIFICATION

### 2.1 Summary of qualification requirements

This qualification will be awarded to people who are credited with a minimum of **94** credits and have met the requirements of both the compulsory and elective sections, as well as all requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy On Work-Integrated Learning for Technical and Vocational Education and Training (TVET).

## 2.2 Detailed qualification requirements

### Compulsory

All the unit standards listed below are required.

**FIELD:** Manufacturing, Engineering and Technology  
**Subfield:** Electrical Engineering  
**Domain:** Electronics

Unit No.	Unit Standard Title	Level	Credits
2033	Inspect and test electronics systems	4	8
2034	Maintain electronics systems	4	12
2035	Upgrade electronics systems	4	9
2036	Manage electronics projects	4	10
2037	Implement and test basic microcontroller based electronics applications	4	14
2038	Manage conflicts in the workplace	5	6

### AND

**FIELD:** Business, Commerce and Management Studies  
**Subfield:** Business Development  
**Domain:** Entrepreneurship

Unit ID	Unit Standard Title	Level	Credits
733	Identify, create and select business opportunities	3	5
734	Develop a business plan as part of business start-up activities	3	12

### AND

**FIELD:** Physical, Mathematical and Computer Sciences  
**Subfield:** Numeracy  
**Domain:** Foundation Numeracy Skills

Unit ID	Unit Standard Title	Level	Credits
892	Apply knowledge of intermediate mathematics in different context	4	6

### AND

**FIELD:** Manufacturing, Engineering and Technology

**Subfield:** Foundational Engineering Science and engineering drawing

**Domain:** Foundational Engineering Science and Drawing Skills

Unit ID	Unit Standard Title	Level	Credits
896	Apply advanced knowledge of engineering science in different contexts	4	6
902	Apply knowledge of advanced engineering drawing in different contexts	4	6

### 3 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.

### 4 SPECIAL ARRANGEMENTS

4.1 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 month of **industrial / job attachment**, 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 encourage 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.

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  
Rand Street  
Khomasdal  
Namibia  
Telephone number: 061 207 8550  
Facsimile number: 061 207 8551

## **5 TRANSITION ARRANGEMENTS**

### **5.1 Non National Qualifications Framework transition**

None

### **5.2 National Qualifications Framework transition**

This is the first version of this qualification.