

**National Vocational Certificate in Electrical Engineering (Instrumentation and Control)
(Level 5)**

NQF Level of qualification: 5

Total credits available: 102

Total credits required: 102

	Compulsory	Elective
Level 3	17	
Level 5 credits available	85	-
Minimum totals required	102	-

Registration date: 13 June 2019

Scheduled review date: 2024

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 instrumentation and control. It is awarded to people who have demonstrated the skills and knowledge required to apply knowledge of programmable logic controllers, Tune and adjust control loop, apply Knowledge on Supervisory Control and Data Acquisition (SCADA), manage a project, apply knowledge of Industrial communication, apply knowledge of data communication, demonstrate knowledge of data communication.

The entry requirement for this qualification is a National Vocational Certificate in Electrical Engineering (Instrumentation and Control) (Level 4) 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 **102** credits and have met the requirements of both the compulsory sections, as well as all requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy On Work-Integrated Learning (WIL) for Technical and Vocational Education and Training (TVET) Sector.

2.2 Detailed qualification requirements

Compulsory

All the unit standards listed below are required.

FIELD: Manufacturing, Engineering and Technology

Subfield: Electrical Engineering

Domain: Instrumentation and Control

Unit No.	Unit Standard Title	Level	Credit
2067	Apply knowledge of Programmable Logic Controllers (PLCs)	5	9
2068	Tune and adjust control loop	5	6
2069	Apply knowledge of industrial communication	5	14
2070	Demonstrate knowledge of data communication	5	6
2071	Apply knowledge of data communication	5	10
2072	Apply Knowledge of Supervisory Control and Data Acquisition (SCADA)	5	10
2073	Perform maintenance, diagnosis and repairs on Programmable Logic Controllers (PLCs)	5	15
2074	Manage a project	5	15

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

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 6 months period 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 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.

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.