

National Vocational Certificate in Solar Equipment Installation and Maintenance (Level 1)
--

Level of qualification: 1

Total credits available: 40

Total credits required: 40

	Compulsory	Elective
Level 1 credits:	40	
Minimum total credits required:	40	

Registration date: 28 March 2018

Scheduled review date: 2023

Body responsible for the qualification: Namibia Training Authority (NTA) through the Mining and 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 has been developed to assist with the advancement of people across the electrical industry in which solar equipment installation and maintenance are carried out. The intention of this qualification is to assist:

- Those who have been in the workplace for a long time, using recognition of prior learning to assess and recognize workplace knowledge and skills which have been acquired without the benefit of formal education and training.
- New entrants into the field, by describing the learning outcomes required to participate effectively, e.g. in a structured workplace development program.
- Education, training and development providers, by providing guidance for the developing of appropriate learning programs and assessment tools.
- Employers, through identifying and addressing skills gaps, which in turn lead to increased productivity and business objective achievement.

This qualification therefore provide opportunities for salaried or self – employed personnel to contribute to society by facilitating social and economic transformation and empowerment, as well as general upliftment of the electrical industry and Namibia in general.

Holders of this qualification are able to apply safety rules and regulations in a solar energy installation environment, demonstrate basic knowledge of electricity, demonstrate basic knowledge of environmental issues relating to solar energy installations, demonstrate correct use of basic measuring instruments, demonstrate knowledge of plumbing principles, demonstrate knowledge of solar energy technologies, draw and interpret basic technical drawings, install solar home systems, perform basic estimations, measurements and calculations, and use and maintain electrical and mechanical tools for solar installations.

This qualification leads to the National Vocational Certificate in Solar Equipment Installation and Maintenance (Level 2).

2. REGULATIONS FOR THE QUALIFICATION

2.1 Summary of qualification requirements

The minimum entry requirement for this qualification is the ability to demonstrate basic communication skills in the English language and numeracy.

This qualification will be awarded to people who are credited with 40 credits and have met the requirements of the compulsory section, 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: Solar Equipment Installation and Maintenance

Unit ID	Unit Standard Title	Level	Credit
1641	Apply safety rules and regulations in a solar energy installation environment	1	3
1642	Demonstrate basic knowledge of electricity	1	2
1643	Demonstrate basic knowledge of environmental issues relating to solar energy installations	1	4
1644	Demonstrate correct use of basic measuring instruments	1	2
1645	Demonstrate knowledge of plumbing principles	1	5
1646	Demonstrate knowledge of solar energy technologies	1	4
1647	Draw and interpret basic technical drawings	1	5
1648	Install basic solar home systems	1	6
1649	Perform basic estimations, measurements and calculations	1	6
1650	Use and maintain electrical and mechanical tools for solar equipment installations	1	3

3 CREDIT RECOGNITION AND TRANSFER ARRANGEMENTS

Credits for any version of a unit standard of the same identification number will be recognized 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 Industrial/job attachment which is defined as a period of time 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), is compulsory for this qualification.

Training providers are expected to facilitate and organise a job attachment period for their trainees within the relevant industry for a minimum period of 3 months.

Training providers are encouraged to consult the **National Policy on Work-Integrated Learning for Technical and Vocational Education and Training (TVET)** for further details on stakeholder responsibilities, allowance/grant, supervisory and assessment regulations governing industrial/job attachment for technical vocational education and training.

- 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.