

National Vocational Certificate in Solar Equipment Installation and Maintenance (Level 2)

Level of qualification: 2

Total credits available: 44

Total credits required: 44

	Compulsory	Elective
Level 2 credits:	44	
Minimum total credits required:	44	

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 leads 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 demonstrate basic computer literacy, demonstrate correct use of advanced measuring instruments, demonstrate knowledge of photo-voltaic technology, demonstrate knowledge of Solar Water Heating technologies, , develop, interpret and apply intermediate technical drawings, install Photo Voltaic Pumps, install Solar Home Systems (from 100 – 500 Watts or to the inverter of 800 Watts), install Solar Water Heaters (one collector), and prepare solar equipment mounting structures.

This qualification leads to the National Vocational Certificate in Solar Equipment Installation and Maintenance (Level 3).

2. REGULATIONS FOR THE QUALIFICATION

2.1 Summary of qualification requirements

The entry requirement to this qualification is the National Vocational Certificate in Solar Equipment Installation and Maintenance (Level 1) or equivalent.

This qualification will be awarded to people who are credited with 44 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 outcomes of learning 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
1651	Demonstrate basic computer literacy	2	3
1652	Demonstrate correct use of advanced measuring instruments	2	3
1653	Demonstrate knowledge of photo-voltaic technology	2	3
1654	Demonstrate knowledge of Solar Water Heating principles and technologies	2	3
1655	Develop, interpret and apply intermediate technical drawings	2	5
1656	Install Photo Voltaic Pumps	2	4
1657	Install Solar Home Systems	2	10
1658	Install one collector Solar Water Heater	2	10
1659	Prepare mounting structures	2	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 6 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.