

<b>National Vocational Diploma in Automotive Engineering (Automotive Mechatronics) (Level 5)</b>
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**Level of qualification: 5**

**Total credits available: 120**

**Total credits required: 120**

	<b>Compulsory</b>	<b>Elective</b>
<b>Level 5 credits available</b>	<b>120</b>	<b>None</b>
<b>Minimum totals required</b>	<b>120</b>	<b>None</b>

**Registration date:** 22 April 2020

**Scheduled review date:** 22 April 2025

**Body responsible for the qualification:** Namibia Training Authority through the Manufacturing, Automotive Sales and Arts & Crafts 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 effectively in various industries making use of the automotive repair and maintenance skills. Recipients of this qualification are able to conduct the essential maintenance and related operations associated with the range of vehicles in use today and efficient and safe operational practices in one of the following specialisation areas:

- Light Vehicles
- Earthmoving equipment
- Commercial Trucks and Buses
- Construction and Agriculture Equipment

This qualification is awarded to people who have demonstrated the skills and knowledge required to apply automotive electrical and electronic engineering principles, fit light vehicle accessories, repair open loop and closed loop control systems, maintain motor vehicle air-conditioning systems, repair vehicle safety and security systems, maintain vehicle comfort and convenience, service hybrid vehicles, apply hydraulic principles, maintain hydraulic hoses and pipes, maintain hydraulic lift cylinders and control systems, and maintain hydraulic pumps and motors. They further have a good understanding of maintain specialised earthmoving machines and plant equipment, maintain agriculture planting and harvesting machines and ground preparation implements.

## 2 REGULATIONS FOR THE QUALIFICATION

### 2.1 Summary of qualification requirements

The entry requirement for this qualification is the National Vocational Certificate in Automotive Engineering (Automotive Mechatronics) Level 4 and the ability to demonstrate basic communication skills in the English language and numeracy.

This qualification will be awarded to people who are credited with a minimum of 120 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 draft 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:** Automotive Engineering  
**Domain:** Automotive Mechatronics

Unit ID	Unit standard title	Level	Credits
2244	Apply automotive electrical and electronic engineering principles	5	9
2245	Fit light vehicle accessories	5	12
2246	Repair open loop and closed loop control systems	5	10
2247	Maintain motor vehicle air-conditioning systems	5	10
2248	Repair vehicle safety and security systems	5	11
2249	Maintain vehicle comfort and convenience	5	9
2250	Service hybrid vehicles	5	12
2251	Apply hydraulic principles	5	12
2252	Maintain hydraulic hoses and pipes	5	10
2253	Maintain hydraulic lift cylinders and control systems	5	10
2254	Maintain hydraulic pumps and motors	5	15

## 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 months 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**

10 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.

