

<b>National Vocational Certificate in Automotive Engineering (Foundation) (Level 2)</b>
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**Level of qualification: 2**

**Total credits available: 110**

**Total credits required: 110**

	<b>Compulsory</b>	<b>Elective</b>
<b>Level 1 credits available</b>	<b>35</b>	<b>None</b>
<b>Level 2 credits available</b>	<b>75</b>	<b>None</b>
<b>Minimum totals required</b>	<b>110</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 to apply workplace safety fundamentals in automotive workshop, communicate effectively in an automotive workplace, demonstrate basic metal joining techniques used in automotive mechanics, demonstrate knowledge on fuels, lubricants and materials, perform basic metal work in automotive engineering, prepare and use bearings, seals, gaskets, sealants, adhesives and locking devices, use and maintain measuring equipment and hand tools in an automotive workplace, demonstrate knowledge of motor vehicle care, demonstrate knowledge of motor vehicle fundamentals, service wheels and tyres of a motor vehicle in an automotive mechanics workshop, remove and replace electrical/electronic units, repair engine cooling and vehicle oil lubrication systems; demonstrate knowledge; understanding of electrical fundamentals and prepare surfaces for spray painting and apply knowledge of basic mathematical and engineering science related to automotive mechanics. They further have a good understanding of providing basic first aid, demonstrating basic awareness of HIV and AIDS, demonstrating basic knowledge of workplace health and safety, applying basic entrepreneurship, applying knowledge of pre-basic mathematics in different context, applying knowledge of basic engineering science different context and applying knowledge of basic drawing different contexts.

This qualification leads vertically to National Vocational Certificate in Automotive Engineering (Vehicle Collision Repair and Spray Painting) (Level 3) and National Vocational Certificate in Automotive Engineering (Automotive Mechatronics) (Level 3).

## **2 REGULATIONS FOR THE QUALIFICATION**

### **2.1 Summary of qualification requirements**

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

This qualification will be awarded to people who are credited with a minimum of 110 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:** Automotive Engineering  
**Domain:** Automotive Mechatronics

Unit ID	Unit standard title	Level	Credits
73	Apply knowledge of basic mathematical and engineering science related to automotive mechanics	2	3
2199	Apply workplace safety fundamentals in an automotive workshop	2	5
2200	Communicate effectively in an automotive workplace	2	2
2201	Demonstrate basic metal joining techniques used in automotive mechanics	2	6
2202	Demonstrate knowledge on fuels, lubricants and materials	2	3
2203	Perform basic metal work in automotive engineering	2	5
2204	Prepare and use bearings, seals, gaskets, sealants, adhesives and locking devices	2	4
2205	Use and maintain measuring equipment and hand tools in an automotive workplace	2	7
2206	Demonstrate knowledge of motor vehicle care	2	5
2207	Demonstrate knowledge of motor vehicle fundamentals	2	7
77	Service wheels and tyres of a motor vehicle in an automotive workshop	2	3
474	Remove and replace electrical and electronic units	1	8
476	Demonstrate knowledge and understanding of electrical fundamentals	1	6

**AND**

**FIELD:** Manufacturing, Engineering and Technology  
**Subfield:** Automotive Engineering  
**Domain:** Spray Painting

Unit ID	Unit Standard Title	Level	Credits
1982	Prepare surfaces for spray painting	2	7

**AND**

**FIELD:** Health Science and Social Science  
**Subfield:** Core Health  
**Domain:** First Aid

Unit ID	Unit Standard Title	Level	Credits
843	Provide basic First Aid	1	3

**AND**

**FIELD:** Health Sciences and Social Services  
**Subfield:** Core Health  
**Domain:** HIV and AIDS Awareness

Unit ID	Unit Standard Title	Level	Credits
1155	Demonstrate basic awareness of HIV and AIDS	1	6

**AND**

**FIELD:** Health Science and Social Science  
**Subfield:** Preventative Health  
**Domain:** Occupational health and Safety

Unit ID	Unit Standard Title	Level	Credits
1157	Demonstrate basic knowledge of workplace health and safety	1	7

**AND**

**FIELD:** Financial and Business Services  
**Subfield:** Business Development  
**Domain:** Entrepreneurship

Unit ID	Unit Standard Title	Level	Credits
1158	Apply basic entrepreneurship	1	5

**AND**

**FIELD:** Physical, Mathematics and Computer Science  
**Subfield:** Numeracy  
**Domain:** Foundation Numeracy Skills

Unit ID	Unit Standard Title	Level	Credits
890	Apply knowledge of pre-basic mathematics in different context	2	6

**AND**

**FIELD:** Physical, Mathematics and Computer Science  
**Subfield:** Engineering Science and Drawing  
**Domain:** Foundation Engineering Science and Drawing Skills

Unit ID	Unit Standard Title	Level	Credits
893	Apply knowledge of basic engineering science in different contexts	2	6

**AND**

**FIELD:** Physical, Mathematics and Computer Science  
**Subfield:** Engineering Science and Drawings  
**Domain:** Foundation Engineering Science and Drawings Skills

Unit ID	Unit Standard Title	Level	Credits
900	Apply basic knowledge of engineering drawing in different contexts	2	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 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 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 or 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.