

National Vocational Certificate in Automotive Engineering (Automotive Mechatronics) (Level 3)
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Level of qualification: 3

Total credits available: 118

Total credits required: 118

	Compulsory	Elective
Level 3 credits available	118	None
Minimum totals required	118	None

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 carry out motor vehicle major service, demonstrate knowledge of basic electrical and electronic circuits components, maintain batteries and lighting circuits; maintain chassis and suspension systems, maintain motor vehicle emission control, repair steering systems and wheels, service hydraulic and electronically controlled motor vehicle braking system; use and maintain diagnostic testing tools and equipment, implement dealership workshop organisation, demonstrate basic knowledge of advanced car technologies, and repair vehicle lubrication systems and engine cooling systems. They further have a good understanding of identifying, creating and selecting business opportunities, developing a business plan as part of business start-up activities, applying knowledge of fundamental engineering science, applying knowledge of basic mathematics, and applying fundamental knowledge of engineering drawings in different contexts.

This qualification leads vertically to National Vocational Certificate in Automotive Engineering (Automotive Mechatronics) (Level 4).

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 – Foundation (Level 2) and 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 118 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
2208	Carry out motor vehicle major service	3	12
2209	Demonstrate knowledge of basic electrical and electronic circuits and components	3	5
2210	Maintain batteries and lighting system	3	6
2211	Maintain chassis and suspension systems	3	8
2212	Maintain motor vehicle emission control	3	8
2213	Repair steering systems and wheels	3	9
2218	Repair engine cooling systems	3	6
2219	Repair vehicle lubrication systems	3	5
2214	Service hydraulic and electronically controlled motor vehicle braking systems	3	10
2215	Use and maintain diagnostic testing tools and equipment	3	6
2216	Demonstrate basic knowledge of advanced car technologies	3	5
2217	Implement dealership workshop organization	3	3

AND

FIELD: Financial and Business Services

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

AND

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

Unit ID	Unit Standard Title	Level	Credits
891	Apply knowledge of basic mathematics in different context	3	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
894	Apply knowledge of fundamental engineering science in different contexts	3	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
901	Apply fundamental knowledge of engineering drawing in different contexts	3	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 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
Komasdal
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.