

**National Vocational Certificate in Mechanical Engineering (Fitting and Machining)
(Level 4)**

| | |
|------------------------------------|-----|
| NQF Level of qualification: | 4 |
| Total credits available: | 100 |
| Total credits required: | 100 |

| | Compulsory | Elective |
|----------------------------------|-------------------|-----------------|
| level 4 credits available | 100 | - |
| Minimum credit required | 100 | - |

Registration date: 29 November 2018

Scheduled review date: 2023

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 performing fitter and turner tasks. It is awarded to people who have demonstrated the skills and knowledge required to control processes in the engineering workshop, maintain hydraulic and pneumatic system, mill complex components using a milling machine, produce complex components using lathes and supervise workplace operations and enhance workplace productivity. They further have a good understanding of establish a business as part of entrepreneurship operations, implement, control and monitor business operations, apply knowledge of intermediate mathematics in different context, apply advanced knowledge of engineering science in different contexts and apply knowledge of advanced engineering drawing in different contexts.

2 Regulations for the qualification

2.1 Summary of qualification requirements

The entry requirement is the National Vocational Certificate in Mechanical Engineering (Fitting and Machining) (Level 3) or equivalent.

This qualification will be awarded to people who are credited with a minimum of 100 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: Mechanical Engineering
Domain: Fitting and Machining

| Unit No. | Unit Standard Title | Level | Credits |
|----------|---|-------|---------|
| 2089 | Control processes in the engineering workshop | 4 | 10 |
| 2090 | Maintain Hydraulic and Pneumatic system | 4 | 10 |
| 2091 | Mill complex components using a milling machine | 4 | 15 |
| 2092 | Produce complex components using lathes | 4 | 14 |
| 2093 | Supervise workplace operations and enhance workplace productivity | 4 | 6 |

AND

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

| Unit No. | Unit Standard Title | Level | Credits |
|----------|---|-------|---------|
| 735 | Establish a business as part of entrepreneurship operations | 4 | 12 |
| 736 | Implement, control and monitor business operations | 4 | 15 |

AND

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

| Unit ID | Unit Standard Title | Level | Credits |
|---------|--|-------|---------|
| 892 | Apply knowledge of intermediate mathematics in different context | 4 | 6 |

AND

FIELD: Manufacturing, Engineering and Technology
Subfield: Foundational Engineering Science and engineering drawing
Domain: Foundational Engineering Science and Drawing Skills

| Unit ID | Unit Standard Title | Level | Credits |
|---------|---|-------|---------|
| 896 | Apply advanced knowledge of engineering science in different contexts | 4 | 6 |
| 902 | Apply knowledge of advanced engineering drawing in different contexts | 4 | 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 accreditation and registration 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 month 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 encourage 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 arrangements for the VET system up to and including level 5 of the Namibia Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning period. Assessment arrangement applies to all occupations and industries which are encompassed in the technical vocational education 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 for 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 documents may be accessed through:

Namibia Training Authority
Rand Street
Khomasdal
Namibia
Telephone number: 207 8550
Facsimile number: 207 8551
Email info@nta.com.na

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.