

Qualification Information:	Qualification Title	SAQA ID	NQF Level	Credits	
Curriculum Code:	Occupational Certificate: Mechanical Fitter	94021	4	410	
Knowledge Component		Notional Hours	Implementation Schedule (4 Hourly)	Assessment Schedule	Training Venues
653303000-KM-01	Basic engineering theory, NQF Level 3 (32)	320 Hours	80 Days	2 days	Main Campus
653303000-KM-02	Fitting Theory, NQF Level 4 (38)	380 hours	95 days	2 days	Main Campus
Practical Component			(6- Hourly Training Sessions)		
653303000-PS-01	Fabricate simple components or work pieces using basic hand skills and hand tools, NQF Level 2 (6)	60 hours	10 days	7 days	Mechanical Fitter Workshop
653303000-PS-02	Fabricate components or work pieces using power tools or machinery, NQF Level 3 (6)	60 hours	10 days	7 days	Mechanical Fitter Workshop
653303000-PS-03	Disassemble, clean and inspect mechanical sub-assemblies, NQF Level 3 (6)	60 hours	10 days	7 days	Mechanical Fitter Workshop
653303000-PS-04	Replace components and assemble mechanical sub-assemblies and machines, NQF Level 3 (6)	60 hours	10 days	7 days	Mechanical Fitter Workshop
653303000-PS-05	Do fault finding on mechanical sub-assemblies and machines, NQF Level 4 (12)	120 hours	20 days	7 days	Mechanical Fitter Workshop
653303000-PS-06	Repair mechanical sub-assemblies and machines, NQF Level 4 (12)	120 hours	20 days	7 days	Mechanical Fitter Workshop
653303000-PS-07	Install and commission mechanical sub-assemblies and machines, NQF Level 4 (12)	120 hours	20 days	7 days	Mechanical Fitter Workshop
653303000-PS-08	Overhaul mechanical sub-assemblies and machines, NQF Level 4 (20)	200 hours	33 days	7 days	Mechanical Fitter Workshop
Workplace Component			(8 Hourly Training Sessions)		
653303000-WM-01	Fabrication processes in an engineering workshop, NQF Level 2 (20)	200 hours	25 days	7 days	Mechanical Fitter Workshop
653303000-WM-02	Routine mechanical component and machine maintenance processes, NQF Level 3 (40)	400 hours	50 days	7 days	Mechanical Fitter Workshop
653303000-WM-03	Maintenance planning and communication processes, NQF Level 3 (10)	100 hours	13 days	7 days	Mechanical Fitter Workshop
653303000-WM-04	Repair mechanical faults on mechanical sub-assemblies and machines, NQF Level 4 (60)	600 hours	75 days	7 days	Mechanical Fitter Workshop
653303000-WM-05	Overhauling processes in an engineering workshop, NQF Level 4 (60)	600 hours	75 days	7 days	Mechanical Fitter Workshop
653303000-WM-06	Structured planning and communication processes in the workplace, NQF Level 4 (60)	600 hours	75 days	7 days	Mechanical Fitter Workshop
653303000-WM-07	Engineering workshop control processes, NQF Level 4 (10)	100 hours	13 days	7 days	Mechanical Fitter Workshop

General Information

There continuous to be a need for qualified artisans to support and grow the economy of South Africa. Although artisan occupations are primarily focused on hand skills and practical ability, they are supported by a substantial amount of general or vocational or fundamental knowledge learnt at a College.

A career in Engineering, such as Mechanical Fitter, is very demanding. It will be expected from you to work long hours and also on week-ends and public holidays to meet the demand and targets as set by the employer. As reward the salaries of qualified artisans compare favourable to other careers. There is also the opportunity to start your own business.

Who occupation is a Mechanical Fitter?

Mechanical Fitters fit, assemble, erect, install, service, repair and test mechanical plant and machinery according to drawings and specifications. They also keep records of work.

Entry Requirements

- Grade 9/10/11/12 Or NQF Level 1 qualification with mathematics (not mathematical literacy),

Occupational Purpose

The purpose of this qualification is to prepare a learner to be able to fit, maintain and repair sub-assemblies and machines.

A qualified learner will be able to:

- Apply hand skills to fabricate mechanical components using engineering tools.
- Perform engineering maintenance on mechanical components, subassemblies and machines.
- Repair, install and commission subassemblies and machines.

Rationale:

The Mechanical Fitter is a recognised trade qualification which prepares the person to work effectively in various industries by making use of their skills and to meet the challenges of such an environment.

In the field of engineering, fitting is characterised by the provision of engineering maintenance, repair and installation services and support in a variety of industries. The equipment requiring such service and support ranges from sophisticated equipment to antiquated single station machines.

People working in the mechanical engineering field require specialised technical skills and knowledge, as well as highly developed hand skills in order to meet the mechanical engineering requirements of diverse industries.

The primary focus of this curriculum is to develop the ability to repair and install complex mechanical assemblies and diagnose and repair equipment and machinery during production/operation.

Qualifying learners are able to maintain and support the various policies and procedures related to the safety, health, environment and quality systems that govern their workplace.

Output

- Qualified tradesman with a red seal or trade test after 3 years.
- The candidate will pass the new trade test that includes both theory assessment (**Formative Assessments**), **Summative Assessments & Practical Assessments**

EXIT LEVEL OUTCOMES

1. The ability to apply hand skills to fabricate mechanical components using engineering tools.
2. The ability to perform engineering maintenance on mechanical components, subassemblies and machines.
3. The ability to repair, install and commission subassemblies and machines.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

Recognition of Prior Learning (RPL):

RPL for access to the integrated assessment:

Accredited providers and approved workplaces must apply the internal assessment criteria specified in the related curriculum document to establish and conform prior learning. Prior learning must be acknowledged by a statement of results.

RPL for entry requirements to credits the qualification:

Accredited providers and approved workplaces may recognise prior learning against the relevant access requirements.

ARTICULATION OPTIONS

This qualification articulates with qualifications to be developed within the mechanical trades related to the following occupations:

- Mechanical Fitter supervisor.
- Fabricator.
- Mechanical Fitter trainer.
- Automotive Machinist.
- Metal Machinist.
- Fitter and Turner.

Trades Covered by this Qualification:

This qualification covers the following trades recorded on the NLRD:

- ID 61033, Fitter and Turner, Automobile Manufacturing.
- ID 61036, Fitter and Turner, Coal.
- ID 61037, Fitter and Turner, ESKOM.
- ID 61040, Fitter and Turner, Explosives.
- ID 61048, Fitter and Turner, Government.
- ID 61109, Fitter and Turner, Carbonated soft drink.
- ID 61068, Fitter and Turner, Mining.
- ID 61073, Fitter and Turner, Motor.
- ID 61084, Fitter and Turner, Aerospace.

- ID 61087, Fitter and Turner, Tyre and Rubber.
- ID 61134, Fitter and Turner, Sugar.
- ID 61137, Fitter and Turner, Mining.

Career Opportunities

- Mechanical Fitter supervisor.
- Fabricator.
- Mechanical Fitter trainer.
- Automotive Machinist.
- Metal Machinist.
- Fitter and Turner.

General Career Guidance

- The Mechanical Fitter is a recognised trade qualification which prepares the candidate to work effectively in various industries by making use of their skills and to meet the challenges of such an environment.
- In the field of engineering, fitting is characterised by the provision of engineering maintenance, repair and installation services and support in a variety of industries. The equipment requiring such service and support ranges from sophisticated equipment to antiquated single station machines.
- People working in the mechanical engineering field require specialised technical skills and knowledge, as well as highly developed hand skills in order to meet the mechanical engineering requirements of diverse industries.
- The primary focus of this curriculum is to develop the ability to repair and install complex mechanical assemblies and diagnose and repair equipment and machinery during production/operation.
- Qualifying students are able to maintain and support the various policies and procedures related to the safety, health, environment and quality systems that govern their workplace.

Course Requirements:

- PPE – (Purchase from College)
- Safety Boots
- Study Material
- Tool Box
- Log Book

Fees

- Registration Fees: **R1000**
- Deposit: **R5000 (Includes Student Card, Course Material/ Study Material / Assessments Fees)**
- Monthly Instalment: **R3000**
- Duration: **3 Years**