MAURITIUS QUALIFICATIONS AUTHORITY

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NATIONAL CERTIFICATE

LEVEL 3

IN

LIGHT ENGINE MECHANICS

National Certificate Level 3 in Light Engine Mechanics

1. **Level:** **3**
2. **Total Credits:** **113**
3. **Review Date:** **December 2027**
4. **Access to qualification**

4.1 Entry Information

Form III or 9th Grade of the Nine Year Continuous Basic Education (NYCBE)

or

National Certificate Level 2 in Light Engine Mechanics

or

An alternative qualification at Level 2 of the NQF

4.2 Recognition of Prior Learning [RPL]

Potential candidates holding at least 3 years of working experience in the relevant field may access this qualification through Recognition of Prior Learning (RPL) process.

4.3 Award of Qualification Requirements

Unit No.	Unit Standard Title	Level	Credit
Basic Workshop Skills, Tools Identification and Safety			
01	Observe health and safety and safe work practices	3	2
02	Perform basic workshop operations	3	3
03	Practice with special service tools (SST) and equipment associated with light engines	3	3
04	Demonstrate knowledge of equipment identification details and interpret service manual information	3	1
Light Engine Applications			
05	Demonstrate knowledge of light engine applications	3	2
Engine Operation and Parts			
06	Demonstrate knowledge of Spark Ignition engines and electric motor	3	5

07	Demonstrate knowledge of a compression ignition (CI) engine	3	3
Engine Servicing			
08	Demonstrate knowledge of engine removal from a frame	3	4
09	Demonstrate knowledge of engine disassembly	3	6
10	Demonstrate knowledge of measuring instrument	3	3
11	Demonstrate knowledge of engine reassembly and diagnostics	3	6
Lubrication and Cooling System			
12	Demonstrate knowledge of an engine lubrication and cooling system	3	3
Intake and Exhaust Systems			
13	Identify the intake and exhaust systems	3	4
Fuel System			
14	Demonstrate knowledge of fuel delivery, injection and carburetor system maintenance	3	4
Electrical System			
15	Identify and repair common electrical faults	3	4
16	Service and maintain the starting and charging systems	3	5
Ignition System			
17	Service spark plugs and the ignition system	3	3
Transmission, Final Drive and Steering Systems			
18	Service the transmission system	3	3
19	Service the gearbox, propeller shaft and axles	3	5
20	Demonstrate knowledge of the different types of final drive and steering operation	3	3
Braking System, Tyres and Wheels			
21	Service the braking system, tyres and wheels	3	3
Suspension System			

22	Demonstrate knowledge of front and rear suspension	3	3
Equipment Care			
23	Perform preventive/periodic maintenances and extended storage procedures	3	2
Associated Studies			
24	Demonstrate effective communications skills	3	8
25	Demonstrate mathematical skills and knowledge	3	4
26	Demonstrate technical drafting skills	3	8
27	Demonstrate good work ethics	3	1
28	Demonstrate knowledge of and apply safety and health measures	3	1
29	Demonstrate knowledge of entrepreneurship development	3	2
30	Demonstrate knowledge of green technology and sustainable development	3	1
31	Demonstrate understanding and use of information technology	3	4
32	Demonstrate knowledge of physical education	3	4
		Total Credits	**113**

5. Purpose

This qualification has been designed to equip trainees with the knowledge and skills required for employment as assistant mechanic for light engine equipment and to develop their innovative ability to address the new and future challenges of society.