

MAURITIUS QUALIFICATIONS AUTHORITY

NATIONAL CERTIFICATE LEVEL 3

IN

REFRIGERATION

AND

AIR CONDITIONING

National Certificate Level 3 in Refrigeration and Air Conditioning

1. Level of qualification: 3

2. Total Credits: 103

3. Review date: October 2025

4. Access to qualification

4.1 Entry information

National Certificate of Education (NCE)/ 9th Grade of the Nine Year Continuous Basic Education (NYCBE)

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					
1	Demonstrate knowledge of and apply safe working practices on an engineering worksite	3	2		
2	Select, use and care for engineering tools and equipment	3	9		
3	Set, use and maintain bench drilling machines	3	2		
Science and basic electricity					
4	Demonstrate knowledge of basic science	3	2		
5	Demonstrate knowledge of electricity and measure basic electrical parameters	3	2		
	Domestic refrigeration				
6	Install a domestic refrigerator	3	3		
7	Carry out tests on a hermetic reciprocating compressor of a domestic refrigerator	3	2		

8	Test and replace electrical components of a domestic refrigerator	3	3	
9	Carry out pressure test, carry out leak test, pull a vacuum, flush and charge refrigerant in a domestic refrigerator	3	4	
10	Troubleshoot faults in a domestic refrigerator	3	2	
11	Clean, maintain, service and repair a domestic refrigerator	3	4	
Engineering materials, power hand tools, arc welding and brazing				
12	Demonstrate basic knowledge of engineering materials	3	2	
13	Select, use and maintain portable hand held engineering power tools	3	2	
14	Produce welds using manual electric arc welding machine	3	3	
15	Carry out copper pipework	3	3	
	Domestic Air Conditioning			
16	Install a domestic Air Conditioner	3	4	
17	Carry out tests on hermetic rotary and scroll compressors of a domestic Air Conditioner	3	3	
18	Carry out pressure test, carry out leak test, pull a vacuum, flush and charge refrigerant in a domestic Air Conditioner	3	4	
19	Test and replace electrical components of a domestic Air Conditioner - Cooling-only split type air conditioner	3	3	
20	Test and replace electrical components of a domestic air conditioner - heat pump and digital inverter system	3	2	
21	Plot cooling and heating processes on Psychrometric Chart	3	2	
22	Troubleshoot faults in domestic air conditioners	3	2	
23	Clean, maintain and repair faults in domestic Air Conditioners	3	3	
24	Retrofit and convert a R22 Domestic Air Conditioner to use R290 refrigerant	3	2	
	Associated studies			
25	Demonstrate effective communications skills	3	8	
26	Demonstrate mathematical skills and knowledge	3	4	
27	Demonstrate technical drafting skills	3	8	
28	Demonstrate good work ethics	3	1	
29	Demonstrate knowledge of and apply safety and health measures	3	1	
30	Demonstrate knowledge of entrepreneurship development	3	2	
31	Demonstrate knowledge of sustainable development	3	1	

32	Demonstrate understanding and use of information technology	3	4
33	Demonstrate knowledge and basic performance skills in two physical activities	3	4
	Total Credits	103	

5. Purpose

This qualification is intended for people wishing to pursue a career in Refrigeration and Air Conditioning (RAC).

People awarded with this qualification are able to install, maintain, service, and commission refrigeration and air conditioning plant and equipment.