

MAURITIUS QUALIFICATIONS AUTHORITY

NATIONAL CERTIFICATE LEVEL 3

IN

ELECTRICAL INSTALLATION WORKS

National Certificate Level 3 in Electrical Installation Works

1. Level of qualification: 3

2. Total Credits: 117

3. Review date: July 2025

4. Access to qualification

4.1 Entry information

National Certificate of Education (NCE)

or

National Certificate Level 2 in Electrical Installation Works

or

An equivalent qualification

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				
	Safety in electrical works						
01	Demonstrate knowledge of health and safety regulations in electrical installations	3	2				
02	Observe safety precautions on construction site	3	2				
03	Show ability to work in elevated positions	3	2				
	Basic workshop skills for electricians						
04	Use common electrician hand-tools.	3	2				
05	Demonstrate basic workshop skills related to electrical trade	3	4				
06	Demonstrate knowledge in soft soldering	3	2				
	Basic electrical concepts						
07	Demonstrate knowledge of basic electrical quantities	3	5				

Unit No.	Unit Standard Title	Level	Credit		
08	Use simple electrical measuring instruments	3	3		
09	Demonstrate knowledge in electromagnetism	3	4		
10	Demonstrate knowledge of alternating current characteristics.	3	5		
11	Demonstrate knowledge of basic electronics	3	4		
Electrical cable					
12	Demonstrate knowledge of different types of electrical cords and cables	3	2		
13	Select appropriate size of cables	3	2		
14	Terminate and join cables	3	3		
Lighting circuits					
15	Demonstrate knowledge of commonly used electrical accessories	3	3		
16	Mount and wire a single-phase Consumer Control Unit (CCU)	3	2		
17	Demonstrate ability to safely isolate an electrical installation	3	2		
18	Install incandescent lamps, Compact Fluorescent Lamps (CFL), Light Emitting Diode (LED) lamps and fluorescent lamps	3	3		
19	Carry out fault findings on electrical circuits	3	2		
Power circuits					
20	Wire circuits in PVC conduits, trunkings and on cable trays	3	2		
21	Use portable power tools	3	2		
22	Connect single phase transformers	3	3		
23	Perform concealed wirings	3	2		
24	Lay underground cables	3	2		
25	Install earthing systems	3	2		
26	Install an earth electrode	3	2		
27	Install three-phase industrial socket outlets	3	3		

Unit No.	Unit Standard Title	Level	Credit		
Testing of Electrical Installations					
28	Test installations as per current regulations	3	2		
29	Fill necessary documents related to testing	3	2		
DC and AC Motors					
30	Sketch the circuit diagrams of commonly used single-phase power tools and apparatus	3	2		
31	Demonstrate knowledge of single phase and three phase motors	3	2		
32	Carry out electrical repairs on simple power tools and apparatus	3	2		
33	Repair simple electronic circuits	3	2		
Associated Studies					
34	Demonstrate effective communications skills	3	8		
35	Demonstrate mathematical skills and knowledge	3	4		
36	Demonstrate technical drafting skills	3	8		
37	Demonstrate good work ethics	3	1		
38	Demonstrate knowledge of and apply safety and health measures	3	1		
39	Demonstrate knowledge of entrepreneurship development	3	2		
40	Demonstrate knowledge of sustainable development	3	1		
41	Demonstrate understanding and use of information technology	3	4		
42	Demonstrate knowledge of physical education	3	4		
Total Credits		117			

5. Purpose

This qualification represents a set of foundation skills for Electrical Installation Works. Holders of this qualification are able to install, maintain, and repair electrical wiring and equipment in residential and commercial environment.