

Introduction to Electrical Works

Applying for this course:

Individuals who completed compulsory schooling up to 65 years of age can apply for this course. For further information, kindly contact us on ga.jobsplus@gov.mt stating your ID card number, attaching copies of your qualifications and a copy of your CV highlighting your work experience.

Course Duration

This course is of 21 hours duration.

General pedagogical guidelines and procedures for this course:

The delivery of this course will be mainly held through a mix of classroom sessions and workshop sessions.

The learner will not be assessed at the end of the course and will be eligible for a Confirmation of Attendance indicating the hours attended.

Topics to be covered:

Basic Principles of Electricity: Atoms, Electrons
Electrical Materials: Conductors and Insulators
Domestic Water System (relationship to Electricity)
Electrical Terminology
The scope of Electrical Safety.
Theory: Ohm's law and the Power Triangle.

Electrical Supply: Single phase and three phase
Electrical Voltage bands
Colour codes of wires
Types of earthing systems and components, TT system used in Malta.
Client Service Supply and the Smart meter
Practice: The electrician Toolbox, Wire an electrical plug and an electric kettle.

Components in a Basic Electric Circuits: Wires / Supply / Load.
Control a Circuit by: Different types of switches and Isolators.
Protection in a circuit by: Fuses / MCB / RCD / OVR.
Diagrams how these function inside
Practice: View and handle these various components.

The consumer unit complete with Domestic Circuits
The Power circuits: Ring Power Circuit / Radial Power Circuit / Final Circuit.
Practice: Simple construction of 3 socket

The Lighting Circuits: 1-way / 2-way / 3 way intermediate / Timer circuit for stairways.
Types of lightbulbs
Practice: Simple construction of 1 way and 2-way circuits

Special Locations:
Bathrooms and kitchens
Renewable Energy systems
Solar water heater and The Solar PV systems
Theory: Energy Saving and costings.

Health and safety recommendations