Electrical Domestic Installation (License A)

Applying for this course:

To apply for this course, you should have completed compulsory schooling up to 65 years of age and hold an 'O' Level qualification in Mathematics and Physics. Individuals who do not possess the entry requirements will be requested to follow a short course and obtain a pass mark in basic mathematics and basic physics to be eligible. If you do not have these qualifications but possess other qualifications or relevant experience, kindly contact us on <u>qa.jobsplus@gov.mt</u> stating your ID card number, attaching copies of your qualifications and a copy of your CV highlighting your work experience.

For safety reasons, a medical certificate testing colour blindness is a requirement for this course.

Course Duration

This course is of 110 hours duration and consists of one Module

General pedagogical guidelines and procedures for this course:

The delivery of this course will be mainly held through a series of discussions and hands-on exercises. The trainer will also be holding lessons with the learners which will consist of various presentations.

General assessment policy and procedures for this course:

The learner will be assessed through an ongoing assessment for learning by way of oral, written or practical exercises that will take place throughout each module, to assess and consolidate the learning being covered.

Module 1 Learning Outcomes - License A

✓	Electrical units, quantity and unit symbols, dimensional prefixes	~	Scope of the IEE Regulations
		✓	I.E.E. definitions
\checkmark	Resistance of conductors and resistance		
	networks	✓	riequiremente for earery; nanaling of toole a
1	Ohm's law and its application to D.C. networks		equipment, precautions and procedures
•	Chin's law and its application to D.C. networks	~	The T.T. system
\checkmark	Voltage drop and power loss in cables		
		✓	Sequence of control in consumer's premises
\checkmark	Heat energy and mechanical energy		and circuit diagrams
~	Illumination, quantity and units, symbols	•	Assessment of load, maximum demand, diversity and diversity factor and use of tables
\checkmark	Cosine law, point to point method		
		✓	Standard lighting circuits, socket outlets ring
\checkmark	Photometry & light meters		and radial circuits, domestic cookers and
			water heaters
\checkmark			
	combinations	~	Need for protection, fuses and MCBs - types and applications

✓ Fundamental laws of magnetism	
	✓ Scope of Earthing
 Electromagnetic induction 	
✓ Difference between AC and DC	 ✓ Special requirements for bathrooms and shower cubicles
 Resistance, Capacitance and Inductance in AC circuits 	 Principle application and operation of earth leakage circuit breakers
✓ The wheat stone bridge	 ✓ Conducting and insulating materials commonly used in electrical installations
✓ Double wound and auto transformers	
	✓ Wiring systems
✓ Simple construction details of core and shell	
type single phase transformers	 ✓ IEE requirements for conductor joints and terminations
✓ Testing of installations, use of testing	
instruments, fault finding and remedies	 Temporary installations excluding large construction sites
✓ Lamp circuits	
	✓ Cable selection, size, use of rating factors and
✓ Bell, call and burglar alarm circuits	rating tables

Module Assessment: There is no assessment for this course.

Upon successful completion of this Course, the trainee may apply to sit for tests leading to a Licence A, administered by the Regulator for Energy & Water Services.