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 the Award in Physics & Mathematics for Electrical Fitters course and obtain a pass mark to be eligible. If you do not have these qualifications but possess other qualifications or relevant experience, kindly contact us on qa.jobsplus@gov.mt 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
- ✓ Resistance of conductors and resistance networks
- ✓ Ohm's law and its application to D.C. networks
- ✓ Voltage drop and power loss in cables
- ✓ Heat energy and mechanical energy
- ✓ Illumination, quantity and units, symbols
- ✓ Cosine law, point to point method
- ✓ Photometry & light meters
- ✓ Cells in series, parallel and series-parallel combinations
- ✓ Fundamental laws of magnetism
- ✓ Scope of the IEE Regulations
- ✓ I.E.E. definitions
- ✓ Requirements for safety, handling of tools & equipment, precautions and procedures
- ✓ The T.T. system
- ✓ Sequence of control in consumer's premises and circuit diagrams
- ✓ Assessment of load, maximum demand, diversity and diversity factor and use of tables
- ✓ Standard lighting circuits, socket outlets ring and radial circuits, domestic cookers and water heaters
- ✓ Need for protection, fuses and MCBs - types and applications
- ✓ Scope of Earthing

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