Vocational Education and Training Award Electrician's Assistant

Applying for this course

To apply for this course, you should be 16 years of age or older and have an MQF Level 1 qualification in Mathematics, English and Maltese. Individuals who do not possess the Mathematics entry requirement will be requested to do a pre-assessment to determine the learner's level of competence. Learners need to successfully pass (45%) a Pre-Assessment Test approved by Jobsplus. Learners who fail the pre-assessment have the option to follow a short course and obtain a pass mark in basic mathematics and basic physics to be eligible for this course. 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. Alternatively, you can send the requested information by post addressed to: Quality Assurance Unit, Jobsplus Training Complex, Triq Birżebbuġa, Ħal Far BBG3000.

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

Course Duration

This course is of 100 hours duration and consists of three Modules

- Module 1 is of 13 hours duration - (including 1-hour assessment)
- Module 2 is of 36 hours duration - (including 2-hour assessment)
- Module 3 is of 51 hours duration - (including 3-hour assessment)

General pedagogical guidelines and procedures for this course:

The delivery of this Course will be mainly held through a series of discussions, class work exercises and hands-on training. The trainer will be holding lessons during which learners' will be exposed to the theoretical aspect. Sessions will consist of various presentations, including demonstrations. The practical sessions will be held at Jobsplus' workshop so that the learners are given the opportunity to practice what they are learning.

General assessment policy and procedures for this course:

The learner will be assessed through a written test. The learner will also undergo an ongoing oral assessment of learning and practical exercises that will take place throughout the entire programme. This assessment method gives tutors the opportunity to review and consolidate the learning being covered.

Module 1 Learning Outcomes – **Occupational Health and Safety in the Electrical Trade**

✓ Comply with electrical trade's best health and safety practices and procedures ✓ Deal with the main hazards of working with electricity ✓ Carry out tasks implementing the correct electrical protective devices found in electrical installations for basic protection and fault protection	✓ Correctly use and apply routine maintenance to one's own personal protective equipment typically used in the electrical trade ✓ Be responsible for selecting the most suitable class of fire extinguishers and their appropriate application ✓ Comply with the non/statutory and IET regulations when carrying out a given electrical task

✓ Carry out tasks utilising the safety feature of electrical protective devices found in electrical installations for fault protection	

Module 1 Assessment: The assessment paper will have only 1 section:

- Section A – A mixture of multiple-choice questions and open ended (short answer questions). These all need to be answered.

The duration of this assessment is of 1 hour and the pass mark is that of 45%.

Module 2 Learning Outcomes – **Fundamental Principles of Electrical Technology, Electrical Installation Requirements and Electrical Drawings**

✓ Carry out electrical documentation using the correct electrical units of measurements ✓ Deal with appropriate circuit loading in accordance with the active, reactive power and the apparent power in AC electrical circuits ✓ Create an electrical circuit suitable for a given electrical task ✓ Manage measuring instruments and testing meters typically used in the electrical industry ✓ Ensure the correct cable type and size are used for a given electrical equipment ✓ Collaborate with the licensed electrician in the installation process of typical electrical equipment	✓ Comply with specifications derived from technical diagrams and drawings for an electrical project ✓ Produce single phase schematic circuits and wiring diagrams ✓ Collaborate with the licensed electrician on a given type of installation required by the electrical project ✓ Comply with the requirements of Appliance Classes and Ingress Protection (IP) rating and IK codes when carrying out a given electrical task ✓ Collaborate with the licensed electrical earthing systems checks and installations

Module 2 Assessment: The assessment paper will have only 1 section:

- Section A – A mixture of multiple-choice questions and open ended (short answer questions). These all need to be answered.

The duration of this assessment is of 2 hours and the pass mark is that of 45%.

Module 3 Learning Outcomes – **Practical Electrical Installations and System Testing**

✓ Collaborate with licensed electrician/engineer in installing appropriate electrical hardware for a given electrical project. ✓ Comply with the specifications derived from schematic circuits and wiring diagrams when working on a given electrical installation. ✓ Carry out installation tasks that result in ease of maintenance, circuit flexibility and correct load distribution of electrical circuits. ✓ Collaborate with licensed electrician/engineer when installing flush and surface mounted electrical circuits. ✓ Deal with the specific installation requirements of Conduit, Cable Trunking, Ladder Racking or Cable Trays installations on a given electrical project. ✓ Collaborate with licensed electrician/engineer on wiring and installation procedures for consumer units / distribution board & internal protective devices ✓ Carry out surface mount sheeted cable installation tasks in compliance with industry standards	✓ Collaborate with licensed electrician/engineer on lighting circuit installations including for bell & shaver units (isolation transformer) and PIR motion detection sensors ✓ Carry out installation tasks of electrical switches and fittings for a given electrical circuit ✓ Collaborate with licensed electrician/engineer on power circuit installations for given single phase applications ✓ Collaborate with licensed electrician/engineer on telecommunications circuit installations for given domestic applications ✓ Collaborate with licensed electrician/engineer in maintenance procedures for earthing systems ✓ Collaborate with licensed electrician/engineer on domestic electrical appliances installations in single phase applications ✓ Collaborate with licensed electrician/engineer in locating and repairing electrical fault.

Module 3 Assessment: The assessment paper will be divided into 2 sections:

- Section A – A mixture of multiple-choice questions and open ended (short answer) questions. These all need to be answered.
- Section B – Practical questions which all need to be answered.

The duration of this assessment is of 3 hours and the pass mark is that of 45%.

The Malta Further and Higher Education Authority (MFHEA) deems this certificate to be at Level 3 of the Malta Qualifications Framework and the European Qualifications Framework for Lifelong Learning. This course comprises study modules to which a total of 7 ECVET points are assigned.