

BASIC ELECTRICAL MAINTENANCE

电气维修基本课程

Please note that BCA Academy will stop offering this course by 31 December 2022. Those who would like to submit course applications, please do so before 31 December 2022

INTRODUCTION

Construction industry in Singapore has transformed itself rapidly in recent years to meet modern demand and expectations of the consumers, and challenges of better building designs and materials. Tradesman training is a way to keep pace with the changing demand.

This course is targeted at the locals, handyman persons and practising tradesmen who require formal training, or new entrants who are keen to take up jobs in basic electrical maintenance in buildings. Homemakers could also acquire useful skills to carry out basic maintenance work.

COURSE OBJECTIVES

This course aims to train and certify locals who are keen to acquire skills in basic electrical maintenance. It also provides an opportunity for existing tradesmen to upgrade through a formal training program to be certified.

COURSE CONTENTS

Basic Theory and Electrical Materials

- Electric circuit consists of resistance, voltage-drop, power & energy
- Cables and conductors
- Multi-core cable
- PVC trunking fittings
- Metal conduit accessories fittings

Operation of Incandescent / Fluorescent Lamps

- Electrical terms and units for electric circuit
- Operation of incandescent lamps
- Operation of fluorescent lighting
- Wiring a 13 amp plug

Consumer Control Unit Operations and Multi-meter

- Consumer Control Unit
- Operations of miniature circuit breakers
- Operations of earth leakage circuit breakers
- Selection of ranges for various measurements using multi-meter

Electrical Principles and Cable Termination

- Ohm's law for electrical circuit
- Resistances connected in series and parallel
- Cable termination by using connector
- Cable termination by using cable lug

PVC Fittings and Wiring Circuits

- Cutting and installation of PVC trucking
- Installation of series circuit using one-way switch

Power and Lighting Circuits

- Characteristics of a parallel circuit
- Installation of power circuit using 13Amp. Switched socket outlets

COURSE CONTENTS (Continued)

Power Circuit and Two-way Switching

- Installation of power circuit using 13A switched socket outlets on a ring circuit
- Installation of 2-way switching circuit using lighting fittings and accessories

Revision

- Revision and Preparation for Test
- Revision and Review of Recent Developments

ENTRY REQUIREMENTS

The courses are mainly targeted at local workers who are new entrants (i.e. those who do not have any experience in the trade). The entry requirements are:

- Singaporeans, Permanent Residents or holders of valid Work Permits.
- Must not be colour blind

LANGUAGE OF INSTRUCTION

- English

CERTIFICATION

Participants who have attended at least 75% of the training sessions and passed the course assessments will be issued with the Certificate of Successful Completion (CSC).

ADMINISTRATIVE DETAILS

Intake:	To be confirmed
Duration:	60 hours (8 days or 15 evenings) (Training: 58 hours; Test/Assessment: 2 hours)
Time:	Day Class: 8.30am - 5.30pm Evening Class: 6.00pm - 10.00pm
Venue:	BCA Academy, 200 Braddell Road
Fee with GST:	S\$1,000.00 (without subsidy)

Singaporeans 40 years old and above OR SME company sponsored Singaporeans or Singapore PRs. Fee payable after 70% funding support	TBA (incl of GST)
Singaporeans, Singapore PRs and non SME company sponsored participants. Fee payable after 50% funding support	TBA (incl of GST)

Participant must achieve at least 75% attendance and pass all assessments. BCA Academy reserves the right to recover the funded amount from the participant (self-sponsored) or employer (company sponsored) if participant did not meet the eligibility criteria. Details of SSG's funding can be found in <https://www.enterprisejobskills.gov.sg/content/upgrade-skills/course-fee-and-absentee-payroll-funding.html> (TGS-2017500010)



To register, please log into our Online StoreFront (OSF) at <https://eservices.bcaa.edu.sg/registration/#/login> or scan QR code and search for course code **43005**