MTBM

EV CHARGING SYSTEM INSTALLATION & OPERATION TRAINING

MTBM Group Sdn. Bhd. (1600656-M)

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Course Title: EV Charging System Installation & Operation Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training equips participants with essential knowledge on the installation, operation and maintenance of Electric Vehicle (EV) charging systems. It covers charger types, electrical requirements, installation standards, safety procedures and operational guidelines. Participants will also learn Malaysia's regulatory requirements, grid connection considerations and best practices for managing EV charging infrastructure effectively.

OBJECTIVE(S):

- Understand EV charging system components and classifications
- Learn installation standards and technical requirements
- Strengthen knowledge of electrical protection and safety procedures
- Understand Malaysia regulatory and compliance requirements
- Learn commissioning, testing and verification of EV chargers
- Identify common operational issues and troubleshooting methods
- Enhance skills for managing and maintaining EV charging systems

TARGET GROUP(S):

- EV charger installers and technicians
- Engineers & electrical supervisors
- Facility managers & building operators
- EPC contractors handling EV infrastructure
- Automotive service centres & fleet operators
- Organisations deploying EV charging stations

ENTRY REQUIREMENT(S):

- Able to read, write, and communicate in Malay/English

TOPIC(S):

1. Introduction to EV Charging Technologies and System Components
2. EV Charger Types, Ratings and System Architecture
3. Electrical Requirements, Wiring Standards and Protection Devices
4. Installation Procedures, Site Preparation and Mounting Requirements
5. Regulatory Compliance, Licensing and Suruhanjaya Tenaga Guidelines
6. Commissioning, Testing and Operational Verification
7. EV Charger Operation, Monitoring and Basic Troubleshooting
8. Maintenance Requirements, Safety Practices and Documentation

LIST OF REFERENCE BOOK(S):

- Suruhanjaya Tenaga (ST) EV Charger Technical Guidelines
- IEC & ISO Standards for EV Supply Equipment (EVSE)
- OEM EV Charger Installation Manuals
- Electrical Safety & Protection Standards
- Malaysian EV Infrastructure Compliance Documentation

LIST OF TEACHING AID(S):

- LCD projector
- Computer
- Whiteboard with accessories

METHODOLOGY(S):

- Lecture
- Case studies
- Practical component review
- Demonstration sessions
- Group discussions

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TRAINING SCHEDULE

Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 9:45 am	Topic 1: Introduction to EV Charging Technologies
9:45 am – 10:30 am	Topic 2: EV Charger Types & System Architecture
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 11:30 am	Topic 3: Electrical Requirements & Protection Devices
11:30 am – 12:30 pm	Topic 4: Installation Procedures & Site Preparation
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 2:30 pm	Practical: Charger Components & Mounting Review
2:30 pm – 3:30 pm	Case Study: EV Charger Installation Scenarios
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Workshop: Installation Planning & Checklist

TRAINING SCHEDULE

Day 2

Time	Activity / Topic
8:30 am – 9:00 am	Recap of Day 1 & Q&A
9:00 am – 9:45 am	Topic 5: Regulatory Compliance & ST Requirements
9:45 am – 10:30 am	Topic 6: Commissioning, Testing & Verification
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 11:30 am	Topic 7: Operation, Monitoring & Basic Troubleshooting
11:30 am – 12:30 pm	Practical: Charger Diagnostic Tools & Testing
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 2:30 pm	Topic 8: Maintenance Requirements & Documentation
2:30 pm – 3:30 pm	EV Charger Safety Simulation & Incident Response
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Final Review, Q&A & Closing