



FMM INSTITUTE

(C10626805080/ 199901000527/ 475427-W)
Centre for Professional Development



Electrical Maintenance for Industrial Machines

Introduction

Industrial operations are increasingly challenged to maximize asset performance and reliability. Electrical component failures can disrupt production, but structured maintenance programs and troubleshooting skills can minimize downtime. This course provides practical knowledge and skills for performing first-line electrical maintenance tasks safely and effectively.

Who Should Attend

- Maintenance staff with limited electrical background (e.g., mechanical fitters, operators).
- Personnel involved in industrial equipment maintenance as part of multi-skilling programs.

All cancellations must be made in writing. There will be no charge for cancellation received 7 or more working days before the start of the programme. Cancellation received 5 working days before the start of the programme is subjected to a cancellation fee of 50% of the course fees. Cancellation received 3 working days and below before the start of the programme is subjected to cancellation fee of 100% of the course fees. If the participant fails to attend the programme, the full course fees are payable. However, replacement can be accepted at no additional cost.

ADMINISTRATIVE DETAILS

Date : **May 12-13, 2026**
(Tuesday-Wednesday)

Time : **2 Days (9:00 am - 5:00 pm)**

Venue : **FMM Institute, Johor Branch**
No. 1 & 3, Jalan Kencana Mas 1/1,
Tebrau Business Park III,
81100 Johor Bahru, Johor

Fees : **RM 1,215.00 (FMM Member)**
RM 1,350.00 (Non member)
The fee inclusive Service Tax at 8%
(SST No: W10-1901-32000105)

Closing Date : **April 28, 2025 (Tuesday)**

Training Provider : **FMM Institute Johor**
MYCOID: 475427W_JOHOR



COURSE CONTENTS

Basic Electrical Principles

- Electricity fundamentals, voltage, current, resistance, and measurement using multimeters
- Use of Ohm's Law in simple resistive circuits.

Industrial Machine Fundamentals

- Basic block and wiring diagrams
- Switches, relays, contractors, solenoids, actuators
- Magnetic fields and coil applications
- Practical exercised on circuit assembly and testing

Power Supply and Protection

- AC and DC systems, transformers, timers and relays
- Single-phase vs. three-phase systems
- Earthing and protective devices (fuses, MCBs, RCCBs, ELCBs)
- Common causes of faults such as overloads, earth faults, insulation breakdown

Cables and Connections

- Cable types and sizing considerations
- Safe terminations and connections
- Continuity and insulation testing with precautions

Industrial Machine Problems

- Power supply issues, tripping circuits
- Inverter, controller, and motor failures
- Heater and assembly faults
- Developing an action plan for electrical component failures

TRAINING METHODOLOGY

- Presentations and discussions
- Demonstrations of equipment
- Hands-on exercises with circuit construction and troubleshooting

FACILITATOR

Dr Aloysius DeCruz has been conducting training since 1997 in a variety of topics in HVAC. Prior to the training and academic career, he had five years of industrial experience. The hands-on approach he acquired during the industry jobs has proven to be an asset while delivering professional training. He has done numerous trainings for design professionals, maintenance technicians, and academic staff. The clients include manufacturing companies, government sector institutions, hospitals, supermarkets, etc. His trainings are well rated and has motivated a good number of personnel. He keeps his interest and actively update on the new developments in the field.



FMM INSTITUTE

(C10626805080/ 199901000527/ 475427-W)
Centre for Professional Development



ELECTRICAL MAINTENANCE FOR INDUSTRIAL MACHINES

MAY 12 - 13 ,2026 | VENUE: FMM INSTITUTE, JOHOR BRANCH

FMM Institute (475427-W)

Puan Sabrina / Pn. Astri / Pn. Ain

Email : sabrina@fmm.org.my / astri@fmm.org.my
/ nur_ain@fmm.org.my

Tel: 07-357 7613 / 14 / 15 / 16 Fax: 07-357 7618

Please tick accordingly:

Fees: **FMM Member: RM 1,215.00/pax**
(inclusive of 8% Service Tax (SST No: W10-1901-32000105))

Non Member: RM 1,350.00/pax
(inclusive of 8% Service Tax (SST No: W10-1901-32000105))

Dear Sir/Madam,

Please register the following participant (s) for the above programme:

(To be completed in BLOCK LETTERS)

1.Name:	IC No:	Nationality:
-----	-----	-----
Designation:	Email:	Mobile No.:
-----	-----	-----
2.Name:	IC No:	Nationality:
-----	-----	-----
Designation:	Email:	Mobile No.:
-----	-----	-----

(if space is insufficient, please attach a separate list)

Disclaimer

Registration is on a first-come first-served basis. All cancellations must be made in writing. There will be no charge for cancellation received 7 or more working days before the start of the webinar. **Cancellation received 5 working days** before the start of the webinar is **subject to a cancellation fee of 50%** of the webinar fees. **Cancellation received 3 working days and below** before the start of the webinar is **subject to a cancellation fee of 100%** of the webinar fees. **If the participant fails to attend the programme, the full webinar fees are payable.** However, replacement can be accepted at no additional cost. The FMM Institute reserves the right to change the speaker, reschedule or cancel the webinar and all efforts will be taken to inform participants of the changes.

We hereby confirmed that (please tick accordingly):

We will be claiming under **HRD CORP CLAIMABLE COURSES** and full payment would made to FMM Institute in the event that no disbursement from HRD Corp under any circumstances.

I (self-sponsor) / We will **NOT BE CLAIMING under HRD CORP CLAIMABLE**. Payment will be made to the account payee **FMM Institute** by cheque or bank transfer to **Maybank Account No. 501280056601**.

Tin No. : C10626805080
BRO No. : 475427-W
SST No. : W10-1901-32000105

Submitted by:

Name: _____ Email: _____

Designation: _____ Tel No: _____ Moblie No: _____

Company: _____ Address: _____

Tin No. : (Company Tax Number) _____ Business Registration No. (New/Old) _____ SST No (If Applicable): _____

Company Stamp & Signature: _____ Date: _____