MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

LV/MV/HV CIRCUIT BREAKER/SWITCHGEAR & TRANSFORMERS MAINTENANCE, SAFE OPERATION

"Ensuring electrical reliability, safety, and operational excellence across power systems"

Schedule

Date	Venue	Fees (Face-to-Face)
29 – 31 Jul 2026	Dubai, UAE	USD 2495 per delegate
10 – 12 Aug 2026	Dubai, UAE	USD 2495 per delegate
27 – 29 Oct 2026	Doha, Qatar	USD 2495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Reliable operation and proper maintenance of LV, MV, and HV electrical equipment are critical for ensuring safety, minimizing downtime, and extending asset life. Circuit breakers, switchgear, and transformers play a vital role in power distribution systems, and failures can result in serious operational, financial, and safety consequences.

This intensive three-day training program provides participants with practical knowledge and hands-on understanding of maintenance practices, testing methods, fault diagnosis, and safe operating procedures for electrical power equipment. The course integrates technical fundamentals with real-world operational practices and safety standards.

Objectives

By the end of this course, participants will be able to:

- Understand the construction and operation of LV, MV, and HV circuit breakers
- Identify different types of switchgear and transformer technologies
- Apply preventive, predictive, and corrective maintenance practices
- Conduct inspection, testing, and condition monitoring activities
- Recognize common faults and failure modes
- Implement safe operating procedures and electrical safety standards
- Improve equipment reliability and service life

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Why Attend

- Enhance safety in electrical operations and maintenance activities
- Reduce unplanned outages and equipment failures
- Improve compliance with electrical safety regulations and standards
- Gain practical maintenance and troubleshooting skills
- Strengthen reliability and availability of power systems
- Learn best practices used in industrial and utility environments

Target Audience

This program is designed for:

- Electrical engineers and technicians
- Maintenance and reliability engineers
- Power plant and utility operators
- Facility and plant maintenance supervisors
- Electrical safety and compliance professionals
- Engineers responsible for electrical assets and systems

Individual Benefits

Key competencies that will be developed include:

- Ability to maintain and operate LV/MV/HV electrical equipment safely
- Skills in inspection, testing, and fault diagnosis
- Understanding of electrical protection systems
- Knowledge of applicable safety standards and procedures
- Increased confidence in handling high-risk electrical systems

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved electrical system reliability and uptime
- Reduced safety incidents and operational risks
- Extended lifespan of electrical assets
- Better compliance with electrical and safety standards
- Enhanced maintenance planning and execution

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – Electrical system fundamentals, protection principles, and standards
- Case Studies – Real-world equipment failures and incident analysis
- Workshops – Practical maintenance planning, inspection, and troubleshooting exercises
- Peer Exchange – Interactive discussions on operational challenges and solutions
- Tools – Maintenance checklists, testing procedures, and safety templates

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Course Outline

Detailed 3-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM Daily Format: 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Fundamentals of Electrical Power Equipment

Module 1: Electrical Safety & Standards (07:30 – 09:30)

- Electrical hazards and risk assessment
- International safety standards and safe work practices

Module 2: Circuit Breakers – LV, MV & HV (09:45 – 11:15)

- Types, construction, and operating principles
- Protection coordination and applications

Module 3: Switchgear Systems (11:30 – 01:00)

- Air, vacuum, SF_6, and GIS switchgear
- Interlocking systems and control circuits

Module 4: Workshop – Equipment Identification & Safety Analysis (02:00 – 03:30)

Day 2: Maintenance, Inspection & Testing

Module 1: Maintenance Strategies (07:30 – 09:30)

- Preventive, predictive, and condition-based maintenance
- Maintenance planning and documentation

Module 2: Testing & Condition Monitoring (09:45 – 11:15)

- Insulation resistance, contact resistance, timing tests
- Partial discharge and thermal imaging

Module 3: Transformer Maintenance (11:30 – 01:00)

- Power and distribution transformers
- Oil testing, cooling systems, and tap changers

Module 4: Workshop – Maintenance & Testing Scenarios (02:00 – 03:30)

Day 3: Fault Diagnosis, Reliability & Safe Operation

Module 1: Faults & Failure Analysis (07:30 – 09:30)

- Common failure modes of breakers, switchgear, and transformers
- Root cause analysis techniques

Module 2: Safe Operation & Emergency Procedures (09:45 – 11:15)

- Switching procedures and lockout/tagout
- Emergency response and incident management

Module 3: Reliability Improvement & Best Practices (11:30 – 01:00)

- Asset management and lifecycle optimization
- Lessons learned and benchmarking

Module 4: Workshop & Course Wrap-Up (02:00 – 03:30)

- Case study review, key takeaways, and final Q&A

Certification

Participants will receive a Certificate of Completion in LV/MV/HV Circuit Breaker, Switchgear & Transformers Maintenance and Safe Operation, validating their technical competence in maintaining, operating, and ensuring the safety of electrical power equipment.

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training Interested in running this course for your team? Please contact us:	TEL: **+601116373203**	EMAIL: **info@mawaevents.net**