MAWA EVENTS

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

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

ELECTRIC POWER TRANSMISSION & DISTRIBUTION ENGINEERING

"Master the Design, Operation, and Maintenance of Transmission and Distribution Networks for Reliable Power Delivery."

Schedule

Venue (In-house)	Fees
At Your Organization Premises	Ask For The Quotation

Introduction

The efficient transmission and distribution of electrical power are fundamental to modern energy systems. High-voltage transmission networks and distribution systems must be designed, operated, and maintained to ensure reliability, safety, and minimal energy losses.

The Electric Power Transmission & Distribution Engineering course provides participants with comprehensive knowledge and practical skills in planning, designing, operating, and maintaining transmission and distribution networks. Participants will learn about system components, protection schemes, fault analysis, power quality, and performance optimization.

Objectives

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

- Understand the fundamentals and components of transmission and distribution systems.
- Design transmission lines, substations, and distribution networks.
- Operate and maintain transformers, switchgear, and protective devices.
- Implement protection schemes and coordination for safe operation.
- Analyze faults, outages, and system stability issues.
- Optimize power quality and minimize losses across networks.
- Ensure compliance with safety standards, codes, and regulations.
- Apply best practices in planning, operation, and maintenance of power systems.

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

This course is essential for engineers, operators, and maintenance personnel responsible for transmission and distribution networks. Participants will gain hands-on expertise to ensure reliable, safe, and efficient power delivery, reduce operational risks, and improve system performance.

Target Audience

This course is suitable for:

- Electrical Engineers and Technicians
- Transmission and Distribution Network Operators
- Substation and Field Maintenance Engineers
- Power System Planners and Reliability Engineers
- Utility Managers and Industrial Electrical Teams
- Graduate Students in Electrical or Power Systems Engineering

Individual Benefits

- Gain practical expertise in transmission and distribution engineering.
- Enhance skills in system design, fault detection, and troubleshooting.
- Improve understanding of protective devices, coordination, and system stability.
- Boost professional knowledge and career advancement opportunities.
- Develop confidence in operating and maintaining safe and reliable power systems.
- Acquire techniques for optimizing performance and reducing energy losses.

Organizational Benefits

- Ensure reliable, safe, and efficient transmission and distribution operations.
- Reduce downtime, maintenance costs, and system losses.
- Build in-house expertise in power system planning, operation, and maintenance.
- Enhance compliance with regulatory standards and safety codes.
- Improve system performance, reliability, and operational efficiency.
- Support sustainable and cost-effective power delivery.

Instructional Methodology

The training employs a practical, hands-on approach through:

- Interactive lectures and demonstrations of transmission and distribution systems
- Real-world case studies of network design, operation, and maintenance
- Step-by-step exercises on equipment selection, protection schemes, and fault analysis
- Group workshops and collaborative problem-solving sessions
- Assignments focused on power quality, loss reduction, and system optimization
- Continuous feedback and Q&A sessions to reinforce learning

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

Module 1: Introduction to Power Transmission and Distribution Systems

Module 2: Transmission Lines – Design, Operation, and Maintenance

Module 3: Distribution Networks – Components, Planning, and Layout

Module 4: Transformers, Switchgear, and Bus Systems

Module 5: Protective Devices and Coordination Schemes

Module 6: Fault Analysis, Troubleshooting, and Corrective Actions

Module 7: Power Quality and Energy Loss Management

Module 8: Substation and Network Operation Practices

Module 9: Standards, Codes, and Regulatory Compliance

Module 10: Capstone Project – Design, Operation, and Optimization of a Transmission & Distribution Network

Certification

Upon successful completion, participants will receive a Certificate in Electric Power Transmission & Distribution Engineering, validating their expertise in designing, operating, and maintaining safe, reliable, and efficient power transmission and distribution networks.

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**