MAWA EVENTS

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

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ADVANCED POWER TRANSMISSION TECHNOLOGIES

"Enhance the Efficiency, Reliability, and Sustainability of Modern Power Transmission Systems."

Schedule

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

Introduction

Efficient and reliable power transmission is essential for meeting growing energy demands and integrating renewable energy into the grid. Modern transmission systems require advanced technologies, sophisticated monitoring, and intelligent design to ensure stability and minimal losses.

The Advanced Power Transmission Technologies course provides participants with in-depth knowledge of modern transmission systems, including high-voltage AC and DC networks, smart grid integration, and emerging technologies. Participants will learn to design, analyze, and optimize transmission networks, implement advanced protection schemes, and improve system performance through practical case studies and hands-on exercises.

Objectives

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

- Understand modern power transmission principles and system components.
- Design high-voltage AC and DC transmission networks for efficiency and reliability.
- Apply advanced protection schemes and fault analysis techniques.
- Analyze power flow, voltage stability, and transient behavior in transmission systems.
- Integrate renewable energy sources and smart grid technologies into transmission networks.
- Implement strategies to reduce transmission losses and enhance system performance.
- Ensure compliance with international standards and regulatory requirements.
- Utilize emerging transmission technologies for modern grid challenges.

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Why Attend

This course is essential for engineers, planners, and technical managers involved in power transmission. Participants will gain practical knowledge to optimize transmission networks, implement smart solutions, and ensure high reliability and efficiency. Attendees will be equipped to tackle modern transmission challenges and adopt cutting-edge technologies.

Target Audience

This course is suitable for:

- Transmission System Engineers and Planners
- Power System Analysts and Consultants
- Electrical Design and Protection Engineers
- Operations and Maintenance Supervisors
- Utility Managers and Technical Leaders
- Graduate Students in Electrical Power Systems

Individual Benefits

- Develop expertise in modern power transmission design and operation.
- Enhance problem-solving skills for system faults, stability, and efficiency.
- Gain hands-on experience with advanced transmission technologies.
- Improve career prospects and professional credibility in the power sector.
- Learn to integrate renewable energy and smart grid solutions effectively.
- Build confidence in planning, monitoring, and optimizing transmission networks.

Organizational Benefits

- Enhance transmission system reliability and performance.
- Reduce energy losses and operational costs.
- Enable integration of renewable and distributed energy resources.
- Ensure compliance with international safety and operational standards.
- Build internal expertise in modern transmission technologies.
- Improve planning and maintenance efficiency for large-scale networks.

Instructional Methodology

The training employs a practical, project-based approach through:

- Interactive lectures and advanced simulation exercises
- Case studies of real-world transmission network projects
- Step-by-step exercises on power flow, protection, and fault analysis
- Group workshops and collaborative problem-solving sessions
- Assignments focused on modern transmission system challenges
- Continuous feedback and Q&A sessions for skill reinforcement

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Course Outline

Module 1: Overview of Modern Power Transmission Systems

Module 2: High-Voltage AC Transmission – Design and Analysis

Module 3: High-Voltage DC Transmission Technologies

Module 4: Transmission System Protection and Fault Coordination

Module 5: Power Flow, Voltage Stability, and Transient Analysis

Module 6: Power Quality in Transmission Networks

Module 7: Integration of Renewable Energy into Transmission Systems

Module 8: Smart Grid and Automation in Transmission Networks

Module 9: Standards, Codes, and Regulatory Compliance

Module 10: Capstone Project – Advanced Transmission System Design

Certification

Upon successful completion, participants will receive a Certificate in Advanced Power Transmission Technologies, validating their expertise in designing, operating, and optimizing modern power transmission systems.

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**

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