MAWA EVENTS

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

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

UPS SELECTION, INSTALLATION, OPERATION AND MAINTENANCE

"Design, Deploy, and Maintain Reliable Uninterruptible Power Systems"

Schedule

Date	Venue	Fees (Face-to-Face)
03 – 04 May 2026	Doha, Qatar	USD 1995 per delegate

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

Introduction

Uninterruptible Power Supply (UPS) systems play a critical role in protecting sensitive equipment and ensuring continuity of operations in data centers, healthcare facilities, industrial plants, and commercial buildings. Proper selection, installation, operation, and maintenance of UPS systems are essential to maximize reliability, efficiency, and equipment lifespan. This intensive 2-day training provides participants with a comprehensive and practical understanding of UPS technologies and best practices.

The course covers different UPS topologies, sizing calculations, installation requirements, operational considerations, and preventive maintenance strategies. Through real-world examples and hands-on discussions, participants will gain the expertise needed to manage UPS systems effectively and ensure uninterrupted power availability.

Objectives

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

- Understand the fundamentals and functions of UPS systems
- Identify different UPS topologies and their applications
- Select and size UPS systems based on load and operational requirements
- Apply best practices for UPS installation and commissioning
- Operate UPS systems safely and efficiently
- Develop preventive maintenance and troubleshooting strategies

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

- Gain practical knowledge of UPS systems and applications
- Improve reliability and uptime of critical electrical systems
- Reduce operational risks and equipment damage
- Enhance skills in UPS selection, sizing, and maintenance
- Stay updated with industry best practices and standards

Target Audience

This program is designed for:

- Electrical engineers and technicians
- Facility and maintenance managers
- Data center and IT infrastructure professionals
- Project engineers and commissioning engineers
- Professionals responsible for power continuity systems

Individual Benefits

Key competencies that will be developed include:

- Knowledge of UPS technologies and system configurations
- Skills in UPS selection and load sizing calculations
- Ability to supervise installation and commissioning activities
- Competence in operation, monitoring, and fault handling
- Improved preventive maintenance and troubleshooting skills
- Enhanced professional expertise in power continuity solutions

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved reliability of power supply to critical loads
- Reduced downtime and operational disruptions
- Extended lifespan of UPS systems and batteries
- Improved safety and compliance with electrical standards
- Lower maintenance and replacement costs
- Enhanced business continuity and operational resilience

Instructional Methodology

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

- Strategy Briefings – UPS fundamentals, standards, and system design principles
- Case Studies – Real-world UPS failures and best practices
- Workshops – Load sizing, battery selection, and maintenance planning exercises
- Peer Exchange – Group discussions on UPS challenges and solutions
- Tools – UPS sizing worksheets, maintenance checklists, and troubleshooting guides

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 2-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: UPS Fundamentals and Selection

Module 1: Introduction to UPS Systems and Applications (07:30 – 09:30)

- Purpose and importance of UPS systems
- Power quality issues and protection
- Overview of UPS standards and classifications

Module 2: UPS Topologies and System Components (09:45 – 11:15)

- Offline, line-interactive, and online UPS systems
- Rectifiers, inverters, batteries, and bypass systems
- UPS efficiency and redundancy concepts

Module 3: UPS Sizing and Selection Criteria (11:30 – 01:00)

- Load assessment and sizing calculations
- Battery autonomy and runtime requirements
- Environmental and installation considerations

Day 2: Installation, Operation, and Maintenance

Module 4: UPS Installation and Commissioning (07:30 – 09:30)

- Installation requirements and best practices
- Electrical connections and grounding
- Pre-commissioning and acceptance testing

Module 5: UPS Operation and Monitoring (09:45 – 11:15)

- Normal, battery, and bypass operating modes
- Monitoring systems and alarms
- Operational safety procedures

Module 6: Maintenance, Troubleshooting, and Case Studies (11:30 – 01:00)

- Preventive and predictive maintenance strategies
- Battery maintenance and replacement
- Common faults and troubleshooting techniques

Certification

Participants will receive a Certificate of Completion in UPS Selection, Installation, Operation and Maintenance, validating their expertise in UPS system design, installation practices, operational management, and maintenance strategies for reliable power continuity.

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.

MAWA EVENTS

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

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

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