€TRAINING

Uninterruptible Power Supply (UPS)

1 - 5 September 2024
Sharm El-Sheikh (Egypt)
Sheraton Sharm Hotel,
Resort,

Uninterruptible Power Supply (UPS)

REF: O2366 DATE: 1 - 5 September 2024 Venue: Sharm El-Sheikh (Egypt) - Sheraton Sharm Hotel, Resort, Fee: 4465 Euro

Introduction:

An uninterruptible power supply UPS is an electrical device that provides emergency power to a load when the input power source or mains power fails. A UPS differs from a standby generator in that it provides near-instantaneous protection from input power interruptions, by supplying energy stored in batteries. Standby generators typically take several seconds to start up and may have a brief voltage drop when they do.

UPSs are used in a wide variety of applications, including data centers, hospitals, telecommunications networks, and industrial control systems. They are also used in personal computers and other electronic devices to protect them from power surges and outages.

Course Objectives:

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

- Understand the types and operation of UPS systems
- Select the appropriate UPS system for a given application
- Install, operate, and maintain UPS systems
- Troubleshoot UPS problems
- Introduction to UPS systems
- Types of UPS systems
- UPS operation
- UPS topologies
- UPS installation

Targeted Audience:

- This course is designed for electrical engineers, technicians, and other professionals who need to understand, select, install, operate, and maintain UPS systems.

Course Outlines:

Unit 1:

- UPS troubleshooting

- UPS safety
- UPS installation
- UPS commissioning
- UPS operation and maintenance

Unit 2:

- UPS components
- UPS selection
- UPS case studies
- UPS hands-on exercises

Unit 3:

- What is a UPS?
- Benefits of using a UPS
- Applications of UPS systems
- Types of UPS systems: online, offline, and line-interactive
- UPS operation

Unit 4:

- UPS topologies: single-phase and three-phase
- UPS components: rectifier, inverter, battery, and bypass
- UPS selection factors: load type, power rating, and runtime

Unit 5:

- UPS case studies: data center UPS, hospital UPS, and industrial UPS
- UPS hands-on exercises: UPS installation, commissioning, and troubleshooting