

Uninterruptible Power Supply (UPS)

Maldives (Maldives)
15 - 19 September 2025



www.blackbird-training.com



Uninterruptible Power Supply (UPS)

Code: IT28 From: 15 - 19 September 2025 City: Maldives (Maldives) Fees: 5400 Pound

Introduction

An uninterruptible power supply UPS is a battery-powered electronic device that continues to supply electricity to the load for a certain period of time during a utility failure or when the line voltage varies outside the normal limits. It is a typical application. Besides the backup, most UPS also provide surge protection. Modern UPS can either be of the static type or the rotary type.

This course on the importance of Uninterruptible Power Supply UPS is of great interest where electrical installations require continuous power supply. Today s reliance on power from the grid sometimes poses new issues like power quality and interruptions. This training course will address issues pertaining to power quality and mitigation techniques. A closer look at the uninterruptible power supply components and functionalities will be discussed. The battery system which forms a tan integral part of the uninterruptible power supply will be scrutinized in view of its construction, characteristics, merits, and demerits. The state-of-the-art diesel rotary uninterruptible power supply will be deliberated in detail.

Course Objectives

- Define the roles of an uninterruptible power supply with regard to the types of loads it should protect.
- Understand the different types and construction of batteries installed in an uninterruptible power supply.
- To appreciate the merits of the fully automated battery monitoring system.
- Identify the components in the uninterruptible power supply.
- Understand the functionalities and operations of each component of the uninterruptible power supply.
- Competence to perform maintenance by switching on to the bypass mode.
- Be able to interpret the alarms and execute troubleshooting techniques.
- To identify the particular type of uninterruptible power supply unit installed at your premises.

Course Outlines

Day 1: Understanding Uninterruptible Power Supply UPS Fundamentals

- Introduction to uninterruptible power systems and resilient design concepts.
- Comparison between single-input and double-input UPS systems.
- Advantages of installing an uninterruptible power system.
- Addressing power quality issues and outages with UPS.
- Simplified UPS design strategies.
- Comparing UPS systems with standby diesel generators.





Day 2: Exploring Battery Technologies and Chargers

- Overview of various battery technologies and their characteristics.
- Detailed construction and features of lead-acid batteries.
- Detailed construction and features of nickel-cadmium batteries.
- Best practices for battery care and maintenance.
- Insights into battery monitoring systems.
- Types, construction, and features of battery chargers.

Day 3: Uninterruptible Power Supply Systems: Characteristics and Functions

- Differences between online and offline uninterruptible power systems.
- · Key components and functions of UPS filters.
- Overview of double conversion UPS systems.
- Comparison of transformer-based and transformer-less UPS systems.
- UPS operation modes and their functionalities.
- Understanding parallel systems and redundancy in UPS.

Day 4: Diesel Rotary Uninterruptible Power Systems DRUPS: Construction and Operation

- Introduction to diesel rotary uninterruptible power systems DRUPS.
- · Construction and key features of DRUPS.
- Operating principles and functionality of DRUPS.
- Types and characteristics of DRUPS.
- · Advantages and challenges associated with DRUPS.

Day 5: Installation, Applications, Protection, and Maintenance of UPS Systems

- Safety protocols and care procedures for UPS systems.
- Importance of regular maintenance for batteries and UPS systems.
- Protective measures for UPS systems.
- Troubleshooting common UPS issues.
- Condition monitoring techniques for UPS systems.
- Case studies, selection criteria, and design considerations.
- Q&A and session wrap-up.





Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovarsa)ais (Portugal)





Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeax (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden) (Netherlands)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Barcelona (Spain)



Munich (Germany)



Geneva (Switzerland)



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels (Belgium)



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich (Switzerland)



Manchester (UK)



Milan (Italy)





Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

Africa



Baku (Azerbaijan) (Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney (Australia)



Tokyo (Japan)



Jeddah(KSA)



Riyadh(KSA)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Pulau Ujong (Singapore)



Jakarta (Indonesia)



Amman (Jordan)



Beirut (Lebanon)





Blackbird Training Cities

Asia



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)





Blackbird Training Clients



ANNAI Trading Company WLL, Qatar



Alumina Corporation Guinea



Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, **Kuwait**



Nigeria



National Bank (ONB), **Qatar**



Qatar Foundation, **Qatar**



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



Kuwait



Reserve Bar Malawi, **Malawi**



Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya**



Saudi Electricity



BADAN PENGELOLA KEUANGAN Haji, Indonesia



Italy



ENI CORPORATE UNIVERSITY, Italy



Kuwait



General Organization for Social Insurance ral C. Social Insu KSA



Nigeria



National Industries Group (Holding), **Kuwait**



Hamad Medical Corporation, Qatar



USAID **Pakistan**





North Oil company,



EKO Electricity



Oman Broadband



UN.







Blackbird Training Categories

Management & Admin

Professional Skills

Finance, Accounting, Budgeting

Media & Public Relations

Project Management

Human Resources

Audit & Quality Assurance

Marketing, Sales, Customer Service

Secretary & Admin

Supply Chain & Logistics

Management & Leadership

Agile and Elevation

Technical Courses

Hospital Management

Public Sector

Special Workshops

Oil & Gas Engineering

Telecom Engineering

IT & IT Engineering

Health & Safety

Law and Contract Management

Customs & Safety

Aviation

C-Suite Training





+44 7401 1773 35 +44 7480 775526

Sales@blackbird-training.com

www.blackbird-training.com

