

Uninterruptible Power Supply (UPS) Systems: Design to Maintenance

IT & IT Engineering
Barcelona (Spain)
15 - 19 Sep 2025

UK Traininig

PARTNER



Uninterruptible Power Supply (UPS) Systems: Design to Maintenance

Ref: 32106_134642 **Date:** 15 - 19 Sep 2025 **Location:** Barcelona (Spain) **Fees:** 4400 **Euro**

Course Description

This comprehensive 5-day course covers all aspects of Uninterruptible Power Supply UPS systems. Participants will learn about UPS principles, design considerations, installation procedures, and maintenance techniques. The course combines theoretical knowledge with practical applications to provide a well-rounded understanding of UPS systems.

Learning Objectives

- Understand the fundamental principles and types of UPS systems
- Learn to design and select appropriate UPS solutions for various applications
- Master installation procedures and best practices for UPS systems
- Develop skills in UPS maintenance, troubleshooting, and performance optimization
- Gain insights into emerging trends and technologies in UPS systems

Course Modules

Day 1: Introduction to UPS Systems

- UPS fundamentals and operating principles
- Types of UPS systems: static, rotary, and hybrid
- UPS topologies: online, offline, and line-interactive
- Power quality issues and UPS solutions

Day 2: UPS Design and Selection

- Load analysis and UPS sizing
- Battery selection and sizing
- Redundancy configurations
- Environmental considerations
- Cost-benefit analysis

Day 3: UPS Installation and Integration

- Site preparation and planning
- Electrical installation requirements
- Grounding and protection systems
- Integration with existing power systems
- Commissioning and acceptance testing

A graphic of a chessboard with several chess pieces. A large gold king piece is prominent in the foreground, with other pieces like a silver pawn and a gold pawn visible. The board has a checkered pattern.

UK Training
PARTNER

Day 4: UPS Maintenance and Troubleshooting

- Preventive maintenance schedules
- Battery maintenance and testing
- Common UPS faults and diagnostics
- Troubleshooting techniques
- Emergency procedures

Day 5: Advanced Topics and Future Trends

- Energy efficiency in UPS systems
- Smart UPS and remote monitoring
- Modular UPS systems
- Renewable energy integration with UPS
- Emerging technologies in UPS design

Practical Wins for Participants

- Ability to design and specify UPS systems for various applications
- Skills to perform UPS installation and commissioning
- Expertise in UPS maintenance and troubleshooting
- Knowledge to optimize UPS performance and energy efficiency

A graphic of a chessboard with several chess pieces. A large gold king piece is in the foreground, with a silver pawn and a silver knight behind it. In the background, there are concentric circles emanating from a point on the board.

UK Training
PARTNER

Blackbird training cities



Amman (Jordan)



Amsterdam (Netherlands)

Accra (Ghana)

Annecy (France)

Baku (Azerbaijan)

Bali (Indonesia)

Bangkok (Thailand)

Bangkok (Thailand)

Barcelona (Spain)

Batumi (Georgia)

Beijing (China)

Beirut (Lebanon)

Berlin (Germany)

Birmingham (UK)

Bordeaux (France)

Boston, Massachusetts (USA)

Brussels (Belgium)

Cairo (Egypt)

Cape Town (South Africa)

Casablanca (Morocco)

Cascais (Portugal)

Copenhagen (Denmark)

Doha (Qatar)

Dubai (UAE)

Düsseldorf (Germany)

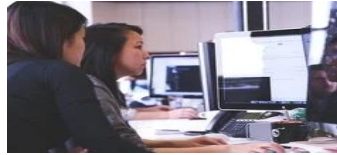
UK Training
PARTNER



Blackbird Training Category



Human Resource



Audit & Quality Assurance



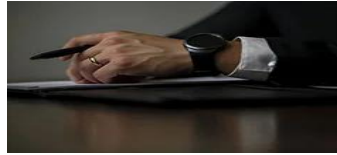
Finance, Accounting, Budgeting



Marketing, Sales, Customer Service



Secretary & Admin



Law and Contract Management



Project Management



IT & IT Engineering



Supply Chain & Logistics



Management & Leadership



Professional Skills



Oil & Gas Engineering



Health & Safety



Telecom Engineering



Hospital Management



Customs & Safety



Aviation



C-Suite Training



Agile and Refinement



Blackbird training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation
Guinea



Booking.com
Netherlands



Oxfam GB International
Organization,
Yemen



Capital Markets
Authority,
Kuwait



Waltersmith Petroman Oil Limited
Nigeria



Qatar National Bank
(QNB),
Qatar



Qatar Foundation,
Qatar



AFRICAN UNION ADVISORY
BOARD ON CORRUPTION,
Tanzania



KFAS
Kuwait



Reserve Bank of
Malawi,
Malawi



Central Bank of Nigeria
Nigeria



Ministry of Interior
Kingdom of Saudi Arabia
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



General Organization for
Social Insurance
KSA



Defence Space Administration
Nigeria



National Industries
Group (Holding),
Kuwait



Hamad Medical
Corporation,
Qatar



USAID
Pakistan



STC Solutions,
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS
UN.



Authority for

UK Training
PARTNER



LONDON TRAINING PROVIDER



www.blackbird-training.com



training@blackbird-training.com



+44 7480 775526 / +44 7401 177335