

## **Power Distribution**

Kuala Lumpur (Malaysia) 27 - 31 October 2025



www.blackbird-training.com



## **Power Distribution**

Code: OG28 From: 27 - 31 October 2025 City: Kuala Lumpur (Malaysia) Fees: 4900 Pound

### Introduction

Power distribution is a critical part of the electrical supply chain, ensuring that electricity is delivered safely and reliably from generation facilities to end-users. This course covers the essential principles, components, and operations of power distribution systems. Participants will delve into various distribution network designs, the equipment involved, maintenance practices, and fault management strategies. Through practical exercises and real-world examples, this training will equip participants with the skills necessary to optimize power distribution systems for enhanced efficiency and reliability.

## Course Objectives

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

- Understand the key principles and components of power distribution systems.
- Learn about different distribution network types and their configurations.
- Develop practical skills for managing, operating, and maintaining distribution equipment.
- Identify and address power quality issues and fault management techniques.
- Improve system reliability through proper planning, operation, and optimization.

#### Course Outlines

### Day 1: Introduction to Power Distribution Systems

- Overview of the electrical power system generation, transmission, and distribution.
- The importance of power distribution within the energy supply chain.
- Types of distribution networks radial, loop, and networked systems.
- Key components of distribution systems substations, transformers, and cables.
- Understanding voltage levels and distribution standards.

## Day 2: Distribution System Design and Configuration

- Core principles of designing distribution networks.
- Load estimation and planning for power distribution.
- Selection of distribution equipment and materials.
- Introduction to distribution automation and smart grids.
- Case study: Designing a small-scale distribution network.

## Day 3: Operation and Maintenance of Distribution Systems

Best practices for operating distribution networks efficiently.

DARTNER

OF THE PROPERTY OF TH



- Preventive and corrective maintenance techniques.
- Inspection and testing of distribution equipment.
- Safety considerations when working with power distribution systems.
- Workshop: Developing a maintenance schedule for a distribution network.

## Day 4: Fault Management and Power Quality

- Identifying and diagnosing faults within distribution systems.
- Protective devices and their coordination fuses, circuit breakers, relays.
- Techniques for improving power quality harmonics, voltage dips, flicker.
- Strategies for fault location and restoration.
- Group activity: Creating a fault response plan.

## Day 5: Future Trends and Optimization in Power Distribution

- Improving energy efficiency in distribution systems.
- The role of renewable energy and distributed generation in power distribution.
- Integrating electric vehicles and energy storage systems into the grid.
- Emerging technologies in power distribution IoT, AI, and big data.
- Final project: Proposing improvements to an existing power distribution network.





# **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

