

Variable Speed Drive (VSD)

Dubai (UAE) 4 - 8 May 2025



www.blackbird-training.com



Variable Speed Drive (VSD)

Code: OG28 From: 4 - 8 May 2025 City: Dubai (UAE) Fees: 4600 Pound

Introduction

This course provides an in-depth understanding of Variable Speed Drives VSD, covering their operation, applications, and troubleshooting techniques. Participants will learn how to control the speed of electric motors, enhance system efficiency, and acquire the skills to optimize and maintain VSD systems.

Course Objectives

By the end of this course, participants will:

- Understand the fundamental principles of Variable Speed Drives VSD.
- Learn the various types of VSDs and their applications.
- Gain knowledge on the installation, commissioning, and configuration of VSDs.
- Develop troubleshooting skills to diagnose and resolve VSD-related issues.
- Learn techniques to optimize VSD performance and improve system efficiency.

Course Outlines

Day 1: Introduction to Variable Speed Drives VSD

- What is a Variable Speed Drive VSD?
- Components and working principles of VSD systems.
- Types of VSDs: AC, DC, and Adjustable Speed Drives.
- Applications and benefits of VSDs in industrial processes.
- Basic setup and configuration of VSDs.

Day 2: VSD Operation and Control Principles

- How VSDs control motor speed.
- Control methods: Voltage control, frequency control, and vector control.
- Understanding torque, speed, and frequency relationships.
- · Benefits of VSDs in energy savings and load management.
- Common control parameters and their settings.

Day 3: VSD Installation and Commissioning

- Site preparation for VSD installation.
- Wiring and connection of VSDs to motors.





- Commissioning VSD systems: step-by-step guide.
- Setting up protective features: overload protection, fault detection, etc.
- Testing and fine-tuning VSD performance.

Day 4: Troubleshooting and Diagnostics of VSD Systems

- Identifying common VSD faults and their causes.
- Using diagnostic tools and software for VSD troubleshooting.
- Electrical and mechanical issues in VSD systems.
- Preventive maintenance to avoid system failures.
- Practical troubleshooting exercises.

Day 5: Optimizing VSD Performance

- Techniques for improving energy efficiency in VSD-controlled systems.
- Adjusting VSD parameters for peak performance.
- Monitoring VSD performance: key indicators.
- Case studies on optimizing VSD systems in different applications.
- Final review and course 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

