

# HVAC Systems for Hospitals: Design, Operation & Maintenance





#### **HVAC Systems for Hospitals: Design, Operation & Maintenance**

**Ref:** 32105\_138560 **Date:** 10 - 14 Aug 2025 **Location:** Sharm El-Sheikh (Egypt) **Fees:** 3700

Euro

#### **Course Description**

This intensive 5-day course provides a comprehensive overview of HVAC systems in hospital environments. Participants will learn about the unique requirements of healthcare facilities, including infection control, air quality standards, and energy efficiency. The course covers design principles, operation strategies, and maintenance best practices for hospital HVAC systems.

#### **Learning Objectives**

- Understand the critical role of HVAC in infection control and patient safety
- Master design principles for healthcare facility HVAC systems
- Learn strategies for energy-efficient operation of hospital HVAC systems
- Develop skills in troubleshooting and maintaining complex healthcare HVAC systems
- Gain knowledge of relevant standards and regulations for hospital HVAC

#### **Course Modules**

#### **Day 1: Introduction to Hospital HVAC Systems**

- Overview of healthcare facility requirements
- Infection control and air quality standards
- HVAC system components in hospitals
- Regulatory framework and compliance

#### **Day 2: Design Principles for Hospital HVAC**

- Airflow and pressure relationships
- Filtration and air cleaning technologies
- Temperature and humidity control
- Ventilation requirements for different hospital areas

#### **Day 3: Energy Efficiency and Sustainability**

- · Energy-saving strategies for hospital HVAC
- Heat recovery systems
- Building automation and control systems
- Sustainable design practices

#### **Day 4: Operation and Maintenance**

UK Traininig PARTNER

Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com

Website: www.blackbird-training.com



- Commissioning and testing procedures
- Preventive maintenance strategies
- Troubleshooting common HVAC issues
- Documentation and record-keeping

#### **Day 5: Advanced Topics and Case Studies**

- Isolation room HVAC design
- Operating room air distribution
- Retrofitting existing hospital HVAC systems
- Case studies and best practices

### **Practical Wins for Participants**

- Ability to design HVAC systems that meet stringent healthcare standards
- Skills to optimize hospital HVAC systems for energy efficiency
- Expertise in maintaining and troubleshooting complex healthcare HVAC systems
- Knowledge to ensure compliance with relevant regulations and standards



Head Office: +44 7480 775 526 | 0 7401 177 335



## Blackbird training cities





Annecy (France)

Baku (Azerbaijan)

Accra (Ghana)

Bali (Indonesia)

Bangkok (Thailand)

Bangkok (Thailand)

Barcelona (Spain)

Batumi (Georgia)

Beijing (China)

Beirut (Lebanon)

Berlin (Germany)

Birmingham (UK)

Bordeax (France)

Boston, Massachusetts (USA)

Brussels (Belgium)

Cairo (Egypt)

Cape Town (South Africa)

Casablanca (Morocco)

Cascais (Portugal)

Copenhagen (Denmark)

Doha (Qatar)

Dubai (UAE)

Düsseldorf (Germany)

Head Office: +44 7480 775 526 | 0 7401 177 335





## **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



Head Office: +44 7480 775 526 | 0 7401 177 335



## **Blackbird training Clients**



MANNAI Trading Company WLL,



Alumina Corporation **Guinea** 



Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, Kuwait



Nigeria





Oatar Foundation, **Qatar** 



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



KEAS Kuwait



Reserve Bank of Malawi, **Malawi** 



Central Bank of Nigeria
Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya** 



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy** 



ENI CORPORATE UNIVERSITY, Italy



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



UN.



Head Office: +44 7480 775 526 | 0 7401 177 335





LONDON TRAINING PROVIDER

