

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

Hospital Management  
Madrid (Spain)  
21 - 25 Jul 2025

UK Traininig

# **PARTNER**



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

**Ref:** 32105\_138549 **Date:** 21 - 25 Jul 2025 **Location:** Madrid (Spain) **Fees:** 4400 **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**

A graphic featuring the text 'UK Training PARTNER' in black, with 'PARTNER' in a larger, bold font. The background shows a chessboard with several chess pieces, including a king and a queen, in gold and silver.

- 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

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](http://www.blackbird-training.com)



[training@blackbird-training.com](mailto:training@blackbird-training.com)



+44 7480 775526 / +44 7401 177335