

## Essential Wireless Communication Systems

*Amsterdam*

*19 - 23 January 2026*

UK Training

# PARTNER



# Essential Wireless Communication Systems

Code: GC28 From: 19 - 23 January 2026 City: Amsterdam Fees: 4900 Pound

## Introduction

This 5-day intensive training course on Wireless Communication Systems is designed for professionals and enthusiasts who wish to gain a deep understanding of the principles, technologies, and applications of wireless communication. This course covers both the foundational concepts and advanced techniques in wireless communication, from cellular networks and WLAN to emerging technologies like 5G and IoT. Participants will gain practical, hands-on experience in implementing and troubleshooting wireless systems, making this an ideal training opportunity for those looking to enhance their expertise in the fast-evolving field of wireless communications.

## Course Objectives

By the end of this course, participants will:

- Understand the Fundamentals: Grasp the core principles and key components of wireless communication systems.
- Explore Various Wireless Systems: Learn about cellular networks, WLAN, Bluetooth, and satellite communications.
- Analyze and Optimize Systems: Evaluate performance and apply optimization techniques for wireless communication systems.
- Master Advanced Techniques: Dive deep into modulation, coding, and MIMO systems.
- Stay Updated on Emerging Trends: Gain insights into cutting-edge technologies like 5G, IoT, and millimeter-wave communication.
- Develop Practical Skills: Acquire hands-on experience to apply knowledge and troubleshoot wireless communication systems.

## Course Outlines

### Day 1: Fundamentals of Wireless Communication

- Introduction to wireless communication systems and their significance.
- Radio wave propagation and its role in communication.
- Antenna characteristics and their impact on wireless communication.
- Signal transmission and reception principles.
- Wireless communication protocols and standards.

### Day 2: Cellular Networks

- Evolution of cellular networks 1G to 5G.
- Cellular network architecture and structure.
- Frequency reuse and handoff strategies.
- Multiple access techniques: FDMA, TDMA, CDMA, OFDMA.
- Overview of LTE and 5G technologies.



### Day 3: Wireless Local Area Networks WLAN & Bluetooth

- Introduction to WLAN and IEEE 802.11 standards Wi-Fi.
- WLAN architecture, components, and security protocols.
- Optimization techniques for WLAN performance.
- Bluetooth technology and its applications.
- Understanding the Bluetooth protocol stack and security.

### Day 4: Satellite Communication Systems & Advanced Techniques

- Basics of satellite communication and its advantages.
- Types of satellites: GEO, MEO, LEO.
- Satellite communication links and design.
- Introduction to modulation techniques: ASK, FSK, PSK, QAM.
- Overview of MIMO Multiple Input Multiple Output systems.

### Day 5: Emerging Wireless Technologies & Future Trends

- The role of IoT in wireless communication.
- Advances in 5G technologies and the road to 6 G.
- Cognitive radio networks and their applications.
- Millimeter-wave communication and its potential.
- Future research directions and trends in wireless communication.

### Why Attend this Course? Wins & Losses!

- Master Wireless Communication: Gain in-depth knowledge of both foundational and advanced wireless communication concepts.
- Career Advancement: Boost your professional profile with insights into the latest technologies, such as 5G, IoT, and MIMO systems.
- Hands-on Expertise: Engage in practical exercises and real-world case studies that provide valuable skills for implementing and troubleshooting wireless communication systems.
- Stay Ahead of the Curve: Be prepared for future challenges in wireless communication, especially with emerging trends like 6G and cognitive radio networks.

### Conclusion

This 5-day course offers an unparalleled opportunity to gain comprehensive knowledge and practical skills in wireless communication systems. Whether you're looking to enhance your career, improve your technical abilities, or stay ahead of the latest trends in the field, this course provides the knowledge and expertise necessary to succeed. Don't miss out on the chance to be a leader in shaping the future of wireless communication technology.

Enroll today and equip yourself with the skills to excel in the rapidly evolving world of wireless communication systems!





# Blackbird Training Cities

## Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Oporto (Portugal)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeaux (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Athens (Greece)



Barcelona (Spain)



Munich (Germany)



Geneva



Prague (Czech)



Vienna



Rome (Italy)



Brussels



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich



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)

### ASIA



Baku  
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Melbourne  
(Indonesia)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Pulau Ujong (Singapore)



Jakarta



Amman (Jordan)



Beirut





## Blackbird Training Cities

### AFRICA



Kigali (Rwanda)



Cape Town



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



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



المؤسسة العامة للتأمينات الاجتماعية  
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.



هيئة تنظيم الكهرباء - عمان  
AUTHORITY FOR ELECTRICITY REGULATION, OMAN  
Authority for

UK Training  
**PARTNER**



## 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



International House 185 Tower Bridge  
Road London SE1 2UF United Kingdom



+44 7401 1773 35  
+44 7480 775526



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



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

UK Training

**PARTNER**

