

LTE 4G and 5G Mobile Networks Course

Istanbul (Turkey)

19 - 23 July 2026

UK Traininig

PARTNER



LTE 4G and 5G Mobile Networks Course

Code: IT28 From: 19 - 23 July 2026 City: Istanbul (Turkey) Fees: 4600 Pound

Introduction

The "LTE 4G and 5G Mobile Networks" course provides engineers, network planners, and technical managers in the telecommunications field with an in-depth understanding of LTE and emerging 5G technologies. The curriculum explores core network architecture, radio access technologies, spectrum management, and advanced mobile network features, preparing participants to effectively deploy, optimize, and troubleshoot modern wireless systems.

Course Objectives

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

- Understand the architecture and key components of LTE and 5G networks.
- Analyze radio access technologies and spectrum allocation strategies.
- Plan and optimize the performance of LTE and 5G networks.
- Apply advanced technologies such as Massive MIMO, network slicing, and edge computing.
- Troubleshoot network issues to maintain service quality and ensure security.

Course Outlines

Day 1: Basics of LTE 4G and Its Architecture

- Overview of the LTE core network Evolved Packet Core - EPC and radio access network
- LTE radio technologies: OFDMA, SC-FDMA, MIMO
- LTE frequency bands and deployment use cases
- Case Study: LTE deployment in a developing market

Day 2: LTE Network Planning and Optimization

- Coverage planning and capacity estimation
- Interference mitigation and handover strategies
- LTE performance metrics and monitoring techniques
- Workshop: Optimization of LTE network parameters

Day 3: Introduction to 5G Architecture and Technologies

- Overview of the 5G core network and service-based architecture
- 5G New Radio NR interface and supported spectrum bands
- Enabling technologies: Massive MIMO, beamforming, and mmWave
- Case Study: 5G deployment for smart city integration

Day 4: Advanced 5G Features and Use Cases



- Network slicing and QoS configuration
- Edge computing and ultra-low latency use cases
- Security challenges and protection strategies in 5G
- Simulation: Designing a network slice for IoT deployment

Day 5: Troubleshooting, Future Trends, and Integration

- Common troubleshooting methods for LTE and 5G networks
- Migration strategies from LTE to 5G
- Emerging trends and the outlook for 6G
- Action Plan: Integrating 4G and 5G into existing infrastructure

Why Attend This Course: Wins & Losses!

- Gain a thorough understanding of LTE and 5G network technologies
- Strengthen skills in planning, deployment, and performance optimization
- Improve troubleshooting capabilities and ensure high service quality
- Prepare for the next generation of mobile communications
- Advance your career in the evolving telecom industry

Conclusion

This course is specifically developed for professionals in the telecom sector who aim to deepen their technical expertise in LTE and 5G networks. With a balanced combination of theoretical foundations and practical case studies, participants will be well-equipped to address current and future mobile network challenges.

Register now and become a certified LTE and 5G expert—ready to lead the future of mobile communications.



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)



Salzburg (Austria)



Florence (Italy)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Athens (Greece)



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)

ASIA



Baku (Azerbaijan)
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Melbourne (Australia)
(Kuwait)



Phuket (Thailand)



Shanghai (China)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City



Seoul (South Korea)



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut



Blackbird Training Cities

AFRICA



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



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,
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



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



Blackbird Training Categories

Management & Admin

Entertainment & Leisure
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

Artificial Intelligence (AI)
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



www.blackbird-training.com

