

O-RAN Architecture and Implementation for 5G Networks

IT & IT Engineering
Munich (Germany)
25 - 29 Aug 2025

UK Traininig

PARTNER



O-RAN Architecture and Implementation for 5G Networks

Ref: 321762_146066 **Date:** 25 - 29 Aug 2025 **Location:** Munich (Germany) **Fees:** 4400 Euro

Course Description

This comprehensive 5-day course provides in-depth knowledge of Open Radio Access Network O-RAN architecture, components, and implementation strategies for 5G networks. Participants will explore O-RAN concepts, interfaces, and deployment scenarios, gaining practical skills in designing and implementing O-RAN solutions. The course covers key topics such as RAN Intelligent Controllers, Open Fronthaul, and integration with 5G core networks.

Learning Objectives

- Understand O-RAN architecture, components, and interfaces
- Analyze O-RAN deployment scenarios and use cases
- Gain practical skills in implementing O-RAN solutions
- Explore RAN Intelligent Controllers and their role in network optimization
- Learn about Open Fronthaul specifications and implementation
- Understand the integration of O-RAN with 5G core networks

Course Modules

Day 1: Introduction to O-RAN

- Overview of RAN evolution and O-RAN concepts
- O-RAN Alliance and ecosystem
- Key drivers and benefits of O-RAN
- O-RAN architecture overview

Day 2: O-RAN Components and Interfaces

- O-CU, O-DU, and O-RU components
- RAN Intelligent Controller RIC architecture
- Open Fronthaul Interface
- E2, A1, and O1 interfaces

Day 3: RAN Intelligent Controllers and xApps

- Near-RT RIC and Non-RT RIC functions
- xApp development and deployment
- AI/ML integration in RAN
- Use cases for RAN optimization

A graphic featuring a chessboard with several chess pieces (a king, a queen, and a pawn) and concentric circles emanating from behind them, suggesting a signal or network. The text 'UK Training PARTNER' is overlaid on the graphic.

UK Training
PARTNER

Day 4: Open Fronthaul and Virtualization

- Open Fronthaul specifications and protocols
- Virtualization and cloudification in O-RAN
- Network slicing in O-RAN context
- Security considerations in O-RAN

Day 5: O-RAN Deployment and Integration

- O-RAN deployment scenarios
- Integration with 5G core networks
- Performance optimization techniques
- Future trends and roadmap for O-RAN

Practical Wins for Participants

- Ability to design and plan O-RAN architectures for various deployment scenarios
- Hands-on experience with RIC and xApp development
- Skills to implement and optimize Open Fronthaul interfaces
- Knowledge to integrate O-RAN solutions with existing 5G networks

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



training@blackbird-training.com



+44 7480 775526 / +44 7401 177335