

LTE 4G and 5G Mobile Networks Course

Amsterdam

29 September - 3 October 2025

UK Training

PARTNER



LTE 4G and 5G Mobile Networks Course

Code: IT28 From: 29 September - 3 October 2025 City: Amsterdam Fees: 4900 Pound

Introduction

The "LTE 4G and 5G Mobile Networks" course offers engineers, network planners, and technical managers in telecommunications a comprehensive understanding of LTE and emerging 5G technologies. The course covers core network architecture, radio access technologies, spectrum management, and advanced features to prepare participants for deploying, optimizing, and troubleshooting modern mobile networks.

Course Objectives

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

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

Course Outline

Day 1: Basics of LTE 4G and Its Architecture

- LTE core network EPC and radio access network.
- LTE radio technologies: OFDMA, SC-FDMA, MIMO.
- LTE spectrum bands and deployment scenarios.
- Case study: LTE deployment in a developing country.

Day 2: LTE Network Planning and Optimization

- Coverage planning and capacity analysis.
- Interference management and handover techniques.
- Performance indicators and LTE network monitoring.
- Workshop: LTE network optimization settings.

Day 3: Introduction to 5G Architecture and Technologies

- 5G core network and service-based architecture.
- New radio interface 5G NR and spectrum bands.
- Key technologies: Massive MIMO, beamforming, mmWave.
- Case study: 5G deployment for smart city infrastructure.



Day 4: Advanced 5G Features and Use Cases

- Network slicing and Quality of Service QoS management.
- Edge computing and ultra-low latency applications.
- Security challenges and solutions in 5G.
- Simulation: Designing a sliced 5G network for IoT applications.

Day 5: Troubleshooting, Future Trends, and Integration

- Common LTE and 5G network issues and troubleshooting techniques.
- Strategies for transitioning from LTE to 5G.
- Emerging trends: vision for 6G and beyond.
- Action plan for integrating 4G and 5G networks into your operations.

Why Attend This Course: Wins & Losses!

- Gain deep knowledge of LTE and 5G networks.
- Enhance deployment and optimization skills.
- Improve troubleshooting and performance tuning abilities.
- Prepare for future advances in mobile technology.
- Expand career opportunities in telecommunications.

Conclusion

This course is designed for telecommunications professionals aiming to deepen their understanding of LTE and 5G networks and stay ahead in a rapidly evolving industry. It combines theoretical knowledge with practical case studies to prepare participants for modern network challenges.

Register now to become a certified expert in LTE and 5G networks and lead the next generation of mobile communications!



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