TELECOMMUNICATIONS & 5G · 4G & 5G NETWORKS

# 5G Fundamentals

أساسيات شبكات 5G

3 days | Intermediate | In person · Live online | Arabic & English

Get a solid, practical understanding of 5G. You will learn what is new in the 5G radio and core, standalone and non-standalone deployment, spectrum and massive MIMO, network slicing and edge computing, and how 5G is used by industry, cities and operators.

## WHO IT'S FOR

Telecom engineers and technicians, IT and network professionals, and managers planning or working with 5G.

## BEFORE YOU START

4G LTE Fundamentals or equivalent knowledge

## WHAT YOU'LL LEARN

- Explain 5G use cases and requirements.
- Describe the 5G NR radio interface, spectrum and massive MIMO.
- Compare standalone and non-standalone deployments.
- Describe the service-based 5G core.
- Explain network slicing and edge computing.

**Training a team?**
We run this course privately for organizations, on your dates, at your site or ours, and adapt the examples to your network and equipment.

COURSE OUTLINE

# 5 modules, 3 days

MODULE 01

### Why 5G

- Use cases: eMBB, URLLC and mMTC
- Requirements and standards

MODULE 02

### 5G radio

- NR and numerology
- Spectrum bands
- Massive MIMO and beamforming

MODULE 03

### Deployment options

- Non-standalone and standalone
- Migration from 4G

MODULE 04

### 5G core

- Service-based architecture
- Core network functions

MODULE 05

### New capabilities

- Network slicing
- Edge computing
- Private 5G networks

ALSO IN 4G & 5G NETWORKS

**4G LTE Fundamentals**, **End-to-End Mobile Networks: from the Handset to the Core**, **Mobile Core Networks: 2G to 4G and IMS**, **5G Core & Network Architecture**, **Wireless Engineering: 2G to 5G, End to End**

## Enrol or ask a question

In person in Damascus · Live online · Private training for teams. Tell us your goals and we will send the dates, the fees and the right level for you.

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