TELECOMMUNICATIONS & 5G · RF & RADIO PLANNING

Modulation & Coding Techniques

تقنيات التعديل والترميز

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

Understand how bits become signals and survive the journey. You will learn analogue and digital modulation, QAM and OFDM, error-control coding, and how modern systems adapt modulation and coding to the radio channel.

WHO IT'S FOR

Radio, transmission and communications engineers, and engineering graduates.

BEFORE YOU START

No formal prerequisites: bring curiosity and a willingness to practise.

WHAT YOU'LL LEARN

- Explain analogue and digital modulation.
- Compare PSK, QAM and OFDM.
- Describe error detection and correction codes.
- Explain adaptive modulation and coding.

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

4 modules, 2 days

MODULE 01

Signals and channels

- Bandwidth and noise
- Channel impairments

MODULE 02

Modulation

- Analogue modulation
- PSK and QAM
- OFDM

MODULE 03

Coding

- Error detection
- Convolutional, turbo and LDPC codes

MODULE 04

Modern systems

- Adaptive modulation and coding
- Examples from 4G and 5G

ALSO IN RF & RADIO PLANNING

RF Fundamentals for Telecom, **Drive Testing & Network Optimisation**, **In-Building Coverage Solutions (IBS & DAS)**, **Radio Network Planning with Atoll**, **Radio Network Planning & Optimisation**

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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