TELECOMMUNICATIONS & 5G · RF & RADIO PLANNING

RF Fundamentals for Telecom

أساسيات الترددات الراديوية للاتصالات

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

Build the radio knowledge every telecom engineer needs. You will learn frequency, wavelength and decibels, how radio waves propagate, antennas and feeders, interference and noise, and how RF measurements are made, with plenty of worked examples.

WHO IT'S FOR

Radio and transmission engineers, field technicians and anyone new to wireless and mobile networks.

BEFORE YOU START

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

WHAT YOU'LL LEARN

- Work with frequency, wavelength, power and decibels.
- Explain propagation, path loss and fading.
- Describe antenna types, gain, patterns and feeders.
- Identify sources of interference and noise.
- Take and interpret basic RF measurements.

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

Radio basics

- Frequency and wavelength
- Power and decibels
- The radio spectrum

MODULE 02

Propagation

- Free-space path loss
- Reflection, diffraction and fading
- Link budgets

MODULE 03

Antennas and feeders

- Antenna types and patterns
- Gain and polarisation
- Cables, connectors and VSWR

MODULE 04

Interference and noise

- Noise and sensitivity
- Interference sources

MODULE 05

RF measurements

- Spectrum analysers
- Drive tests at a glance
- Safety around RF

ALSO IN RF & RADIO PLANNING

Drive Testing & Network Optimisation, **In-Building Coverage Solutions (IBS & DAS)**, **Modulation & Coding Techniques**, **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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