

Introducing 5G

COURSE OUTLINE



Course Details

Name: *Introducing 5G*

Target Audience

This course is designed for participants who have certain degree of experience in mobile communication networks. Participants that would benefit by attending this course are Technicians, Sales/Marketing people and Project/Programme managers who are new in their role.

Training Objective

- By the end of the course, the participants will understand the basics of 5G and Traffic Evolution in Mobile Communications Networks.

Duration of Training: 2 Days

Prerequisite: General knowledge of LTE mobile communication networks.

Module List Detailed

Module 1: Traffic Evolution in Mobile Communications Networks

Topics discussed in this module are listed below:

- New Applications
- Internet of Things
- Cloud computing
- Mobile Data Growth
- 5G Data drivers
- 5G Use Cases
- ITU Requirements for 5G networks: IMT-2020
- 5G 3GPP Standards: Release 15

Module 2: Introducing 5G

Topics discussed in this module are listed below:

- 3GPP Standards: Release 15
- 3GPP 5G New Radio (5G-NR)
 - Rel-15 5G NR Options: Standalone and Non-Standalone
 - Spectrum for 5G
 - Multiplexing and multiple access
 - Frame Structure
 - Numerology
 - Introduction to Massive MIMO
 - Reference Signals
 - 5G Physical Channels
 - Radio Interface Protocols
- 3GPP 5G Architecture
 - 3GPP 5G Architecture: Interface and Protocols
 - 5G Core Network Architecture
 - Network Virtualization
 - Cloud RAN
 - 5G Network Slicing