

Course ID
LTE-EXEC
Course Duration
1 day

Course Title
LTE for Business Professionals & Managers

Related Courses

- LTE: Technology & Business (LTE-BIZ, 2 days)
- LTE/SAE Fundamentals (LTE-FUND, 3 days)
- LTE Tutorial (LTE-CT, 3 days)
- Wireless Broadband: Technology & Regulation (WIRELESS-TL, 3 days)
- All Wireless: RF/Cellular Basics, WiFi, Bluetooth, WiMAX, CDMA, GSM/GPRS/EDGE, UMTS/HSPA, LTE (ALL-WIRELESS, 5 days)

Aimed At

This course is aimed at managers and executives, business planners, policy makers, regulators, sales and marketing, procurement specialists, and others who need a less technical, more business-oriented overview of this important technology.

Group Size

5-25

Prerequisites

Those wishing to take this course should have a basic knowledge of the existing mobile communications systems.

Course in a Nutshell

LTE, or Long Term Evolution of UMTS, is a fourth generation mobile communications technology standardized by 3GPP. It enhances the radio access network to enable support for greater broadband bit rates in both the uplink and downlink direction between the mobile device and the access network. This will enable bandwidth intense applications and services to be delivered to any device, anywhere, and at any time. Alongside LTE, changes to the core network are defined. Known as System Architecture Evolution (SAE), they provide an all-IP bearer platform for delivery of services over a core architecture which has a simplified, flatter design.

This course deals with the key issues of LTE/SAE and what impact it will have in business terms. We begin with a review of the mobile environment and what LTE aims to achieve. We examine the structure and component functionality of the access and core network entities. An overview of the enabling air interface technologies used to achieve the increased performance objectives follows. We finish with a study of the current status

of deployment of the technology, the applications and services it enables, and its future evolution.

Customize It!

Let us know your reason for studying LTE so we can customize the course to your specific needs. If you do not possess prior knowledge of the existing mobile communications environment, the course can be expanded to two days to cover those topics.

Learn How To

- State the drivers and motivation for LTE and LTE Advanced
- Describe the architectural structure of LTE/SAE
- Understand the technology concepts used to achieve LTE broadband bandwidth
- Describe basic operations and procedures of LTE/SAE
- Understand the opportunities that LTE offers in terms of applications and services

Course Outline

- Introduction
 - What is LTE?
 - Where it sits in the mobile communications environment
 - The drivers for LTE
 - The drivers for LTE Advanced
 - How does it compare with UMTS, HSPA, and WiMAX?
 - What does it add to UMTS, HSPA, and WiMAX?
 - What is SAE?
- What LTE Is Designed to Achieve
 - Performance aims
 - Capability goals
 - Architectural considerations
 - Migration considerations
 - Complexity
 - Deployment requirements
- LTE Access Network Technologies
 - Component entities and functionality
 - Interfaces
 - Radio procedures and signaling
 - LTE radio interface overview
 - Backhaul options
- LTE Core Network Technologies (SAE)

- Component entities and functionality
- Interfaces
- All IP platform
- IMS solution
- LTE Voice over LTE
 - VoLTE solution
 - CSFB solution
 - IMS implementation (MMtel)
- LTE Core Network
 - Core network architecture design principles
 - Evolved Packet Core (EPC)
 - LTE specific core entities and functionality
 - Mobility management entity
 - Serving gateway
 - Packet data network gateway
 - Interfaces
 - Bearers and signaling
 - Procedures
 - Interworking requirements of LTE to legacy networks
 - Service delivery and IMS
- LTE Rollout and Future Developments
 - Standards bodies
 - Vendors and operators
 - LTE deployment: Where are we now?
 - What applications and services will LTE enable?
 - LTE Advanced: What it is, what it promises
- Wrap-up
 - Course recap and Q/A
 - Evaluations

DCN NTDR-Ltm-vf