ENG-512 - The Essentials of LTE

Description

A 5-day Training Program to provide participants with an understanding of the essentials of Long-Term Evolution (LTE). The program will explore the evolution from earlier mobile networks to 4G and how LTE is positioned as a key technology in 4G networks. The program will also look at issues and challenges in LTE planning and market development, and the expectations and trends leading to the deployment of 4G mobile networks.

Objectives

- Provide participants with an understanding of: Long-Term Evolution (LTE) in the context of the GSM/UMTS family, basic performance characteristics and requirements of LTE, and capabilities and roles of LTE in operators' portfolio of mobile technologies
- Identify the LTE network architecture and its main functional components
- Describe the LTE air interface and the key technologies it uses to maximize bandwidth
- Identify LTE spectrum planning issues and LTE coverage planning concepts
- Present the challenges and strategies associated with the migration of networks to 4G

Topics

Introduction

- Overview of earlier mobile networks
- Evolving services and applications
- Evolution to 4G mobile technology

Pre-4G mobile network technologies

- Evolved High-Speed Packet Access (HSPA+)
- CDMA2000 3X

- Mobile WiMAX

LTE

- LTE performance criteria
- Network architecture: Evolved Packet Core/System Architecture Evolution (EPC/SAE)
- LTE air interface: principles of operation : orthogonal Frequency-Division Multiple Access (OFDMA), m*ultiple-Input Multiple-Output* (MIMO)

LTE services

- Quality of Service (QoS)
- Security

LTE planning

- Spectrum issues
- Coverage planning

LTE ecosystem and market development

- Infrastructure
- Devices
- Operator services
- Operator commitments & deployment

LTE Advanced

- Performance criteria
- Status and timeline

Migration from 3G to 4G

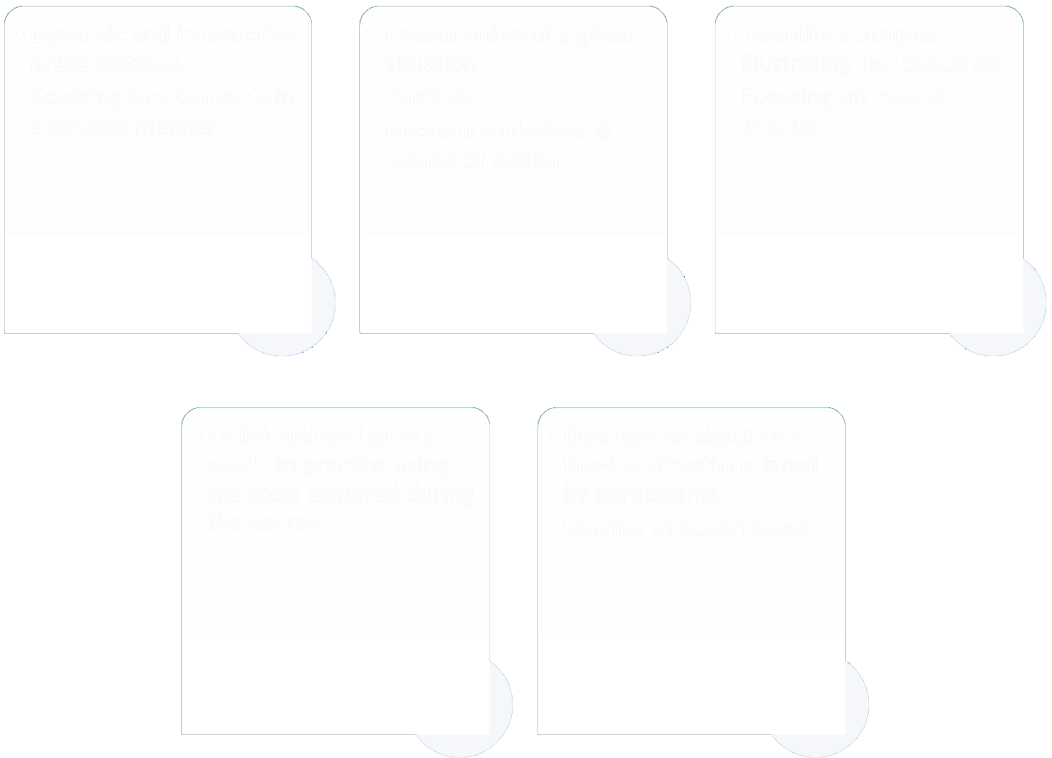
- Challenges
- Solution strategies
- Business strategies

Target Audience

- Telecommunications managers and planners considering the deployment of 4G mobile networks using LTE
- Managers looking to complement their skill-set by gaining a good understanding of LTE

Methodology

A combination of engaging activities and dynamic presentations to stimulate and maximize participants' learning.



Location

A selection of Neotelis' training courses is held in various cities around the world. Please contact us at training@neotelis.com for the complete Yearly Training Calendar.



Neotelis can also deliver in-house sessions of this course specifically for your organization. Please contact us at training@neotelis.com for more information and a Proposal.

About Neotelis

Neotelis provides training, consulting, conferences and publications to the telecommunications industry worldwide. Its team of senior experts has trained thousands of executives and managers working for operators, regulators, policy-makers and governments in over 120 countries around the world.



4802 de Verdun St, Office #1, Montreal, QC, H4G 1N1 Canada
Tel: +1 514 281 1211 Fax: +1 514 281 2005
info@neotelis.com