MGT-300 - Mini MBA in Telecom Technologies

Description

This course is also available as a live distance learning course

A comprehensive 5-day training course to empower participants with key knowledge on current and emerging telecom technologies to successfully plan, design and manage today's and tomorrow's telecom networks.

Objectives

- Review the fundamental concepts of telecom networks and technologies
- Examine current and emergig technologies that are shaping the present and future of telecom networks
- Provide a clear understanding and view of the important technological evolutions in telecom networks
- Present the all-important network support systems
- Explain the key activities and tools of network management

Topics

Note: the course structure may be subject to change as trainings are updated on a regular basis.

Key drivers and trends in telecom technologies and networks

The big picture - Network architectures

- Core versus access
- Public versus private networks
- Media (copper, fibre, coax, radio waves)

Circuit Switched Networks

- Transmission
- Numbering
- Signalling
- Digital hierarchies
- Circuit switching and Public Switched Telephone Network (PSTN)

Packet Switched Networks

- Packet switching vs circuit switching
- Asynchronous Transfer Mode (ATM)
- Ethernet

TCP/IP and the Internet

- OSI 7-layer model
- TCP/IP model
- IPv4 and IPv6
- Special services supporting IP (DNS, FTP, HTTP/HTML, SMTP, WWW)

Wireless and mobile networks

- Antennas and towers
- Satellite communications
- Fixed wireless technologies (Wi-Fi, WiMAX)
- 3G and 4G mobile
- LTE technology and services
- Wireless Personal Area Networks (WPAN): Bluetooth, RFID, NFC
- Roaming

Convergence and Next Generation Network (NGN)

- IP signalling, numbering/addressing, QoS, security
- VoIP
- Broadband access technologies (xDSL, FTTx)
- Multi-Protocol Label Switching (MPLS)
- Convergence – all services on one network
- The Next Generation Network

Support systems

- Business Support System (BSS)
- Operational Support System (OSS)

Network planning, optimization and management

- Network technology and design
- Service definition and forecasting
- Data gathering and traffic characterization
- Traffic concepts and quality of service
- Network deployment and project planning
- Network management tools
- Network optimization

Recent and emerging technologies

- Cloud / xaaS ("x as a Service")
- Over the Top (OTT) services
- Virtualisation
- Mobile commerce and money
- Bring Your Own Device (BYOD)
- Collaboration
- Unified Communications (UC)

- Geolocation
- Triple play / quadruple play
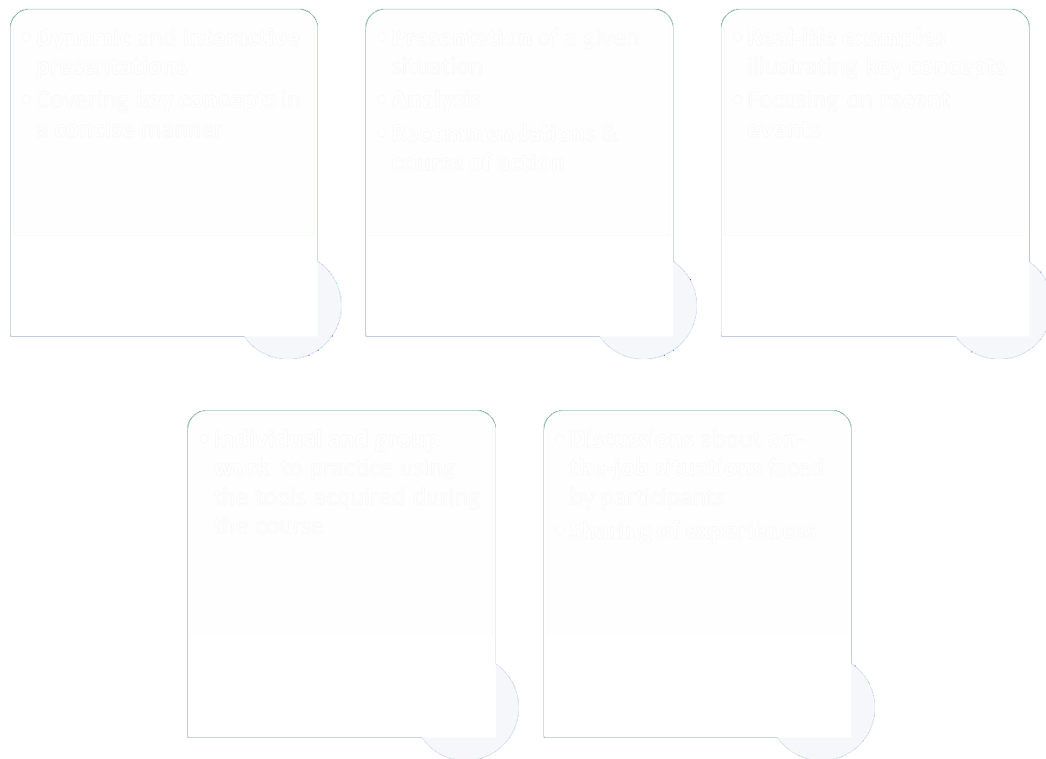- SIP trunking

A glimpse at the future

- Data centres
- State-of-the-art security
- Software-Defined Networking (SDN)
- Network Functions Virtualisation (NFV)
- Machine-to-Machine (M2M)
- Internet of Things (IoT)
- 5G

Target Audience

- Telecom managers looking to complement their skill-set by gaining in-depth knowledge of current and future telecom technologies

Methodology

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

- Dynamic and interactive presentations
- Covering key concepts in a concise manner

- Presentation of a given situation
- Analysis
- Recommending a course of action

- Real-life examples illustrating key concepts
- Focusing on recent events

- Individual and group work to practice using the tools acquired during the course

- Discussions about on-the-job situations faced by participants
- Sharing of experiences

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.