

MobileComm Professionals, Inc.

1255 W 15th Street, Suite 440

Plano, TX 75075

Tel: (972)-633-5100

Toll Free: 1-8777-RF-MCPS

Fax: (972)-633-5106 www.mcpsinc.com

<u>Certification & Training on LTE Overview</u> <u>Course Duration (1 Month)</u>

Course Content

1).LTE Overview-.....(2 Days)

- Why LTE?
- LTE main requirements
- LTE versus other Mobile Technologies
- Network Architecture Evolution
- LTE key features
- Basics of LTE Air Interface
- Standardization around LTE Air interface
- IMT Advanced
- LTE Summary

2).LTE/EPS Network Architecture-.....(3 Days)

- Network Architecture Evolution
- LTE/EPS Network Subsystems
- LTE/EPS Network Elements
- LTE/EPS Network Interfaces
- LTE/EPS Roaming Architecture
- LTE/ EPS interworking with 2G/3G networks
- LTE/EPS inter-working with Non-3GPP access technologies.
- Charging Architecture in LTE/EPS networks.

3).LTE/EPS Mobility & Session Mgmt.....(3 Days)

- LTE/MPS Mobility Areas
- LTE- UE Identifications
- Mobility and Connection Management Terminology
- LTE Mobility and Connection States
- The EPS Bearer
- LTE/EPS Procedures
- Security: EPS Authentication and Key Agreement











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4).LTE Air Interface-.....(6 Days)

- The Rectangular Pulse
- Multipath Propagation. The Cyclic Prefix
- Multi- Carrier Modulation
- Orthogonal Multi- Carriers: OFDM
- Effect of frequency errors in OFDM
- SC-FDMA
- OFDM Transmitter and Receiver
- OFDM Multiple Access
- Subcarriers Assignment Methods
- OFDM implementation n in LTE/ EUTRAN
- LTE/EUTRAN Radio Frames
- OFDM Resource Block
- Modulation Schemes in LTE/ EUTRAN
- LTE/EUTRAN Frequency Variants
- MIMO
- DL & UL Peak bit rates
- LTE UE Categories

5).LTE Radio Channels...... (4 Days)

- LTE Logical channel types
- LTE Transport channel types
- LTE Physical channel types
- Multiplexing of channels

6).LTE Performance-.....(2 Days)

- Timing Advance
- Overview of FDD Performance Evolution
- Peak Bit Rates
- Coverage
- Throughput
- TDD Performances
- Comparison with performance of UMTS











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Holiday for Test Preparation.....(2 Days)

Course Assessment through written test & mock interview







