

LTE Parameters & Signaling

This course addresses employees working in network optimisation. Based on LTE fundamentals the question of how to analyse and optimise the network will be covered. Therefore after highlighting the physical layer and its administration procedures on layer 2 like resource administration will be addressed. A module of Layer 3 procedures offers a detailed insight into procedures like Attach and Service Request and mobility and Radio Resource Management.

Target Group / Requirements

Employees in the area of network optimisation with sound knowledge of UMTS or GSM and basic knowledge in LTE.

Course Content

LTE – Network and Protocol Architecture

- LTE Network Architecture
- LTE Protocol Architecture

LTE – Physical Layer

- Physical Channels and their Configuration in Downlink
- Physical Channels and their Configuration in Uplink
- Resource Allocation in LTE
- MIMO

Physical Channel Procedures

- Timing Advance
- Power Control
- Random Access Procedure

Layer 2 Procedures

- Scheduling
- L2 Measurements and their Configuration
- ARQ and HARQ
- DRX (Discontinuous Reception)

Access Stratum and RRC

- RRC Procedures
- System Information
- Mobility in Idle Mode (Intrafrequency, Interfrequency, Inter-RAT)
- Mobility in Active Mode (Intrafrequency, Interfrequency, Inter-RAT)
- Paging
- Measurement Configuration
- Radio Resource Management Features

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- Self-Organizing and –Optimizing Networks

Course Duration:

3 days

Course Number:

NW1244

Requirements:

Basic Knowledge of LTE

QoS in LTE

- QoS Concept in LTE
- QoS on the individual Interfaces in LTE

Procedures in LTE

- Attach / Detach
- S1 Release Procedure
- Service Request
- Bearer Activation
- Tracking Area Update
- Handover

Certification

Certificates are given to all participants at the end of the course about the successful completion.

Course Registration:

Please contact us via

- phone: +49 89 1894354-405
- email: training@tfk-technologies.de or
- via our website <https://skilleap.com/courses>

You will receive a confirmation of your registration. We can also advise you concerning the best combination of course contents.

For clients with special requirements the optimal training concept can be customized. Modules from our training portfolio can be combined to meet your company-specific needs.