5G Overview and New Core

This course gives an overview about the evolution of mobile networks towards 5G and into the concepts of New Core and its services. It discusses the use cases that are foreseen and their requirements on 5G. The new network architecture is presented, the new core structure and procedures are explained.

Target group / Prerequisites

Technicians, engineers and technical management personnel which work on tasks in mobile networks. The participants should have a good knowledge on the existing mobile network standards, especially on LTE.

Course contents

Introduction
- Evolution of mobile networks
- 3GPP Standards and the timeline for 5G
- Traffic growth
- Standardization

What should 5G be able to?
- Use cases and their prerequisites
- ITU targets
- KPIs

Network architecture
- Service based network architecture
- 5G SA and NSA Architecture
- CUPS
- DECOR
- Mobile Edge Computing, NFV, SDN
- Network Slicing
- Cloud-RAN
- Dual Connectivity
- Migration concepts from 4G to 5G
- WLAN Offloading and unlicensed Access

Protocols and Procedures
- Protocol stacks
- 5G Identities
- User Plane Function Selection
- Procedures for Registration and Session Management
- Mobility and Handover
- PLMN Selection

Duration:
2 days

Course ID:
NW1263

Prerequisites:
Good knowledge of LTE

5G QoS, Voice and other Services

- QoS Concept in 5G
- Implementation of Voice service over 5G
- VoNR, VoeLTE, EPS and RAT Fallback
- VoNR Call Setup
- Emergency Services realization
- VoNR Call Continuity

Further Standardization

- Features and Study Items for Rel. 16 and 17
- Integrated Access and Backhaul
- SON, Satellite Support

Certification

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

Kursanmeldung:

Bitte kontaktieren Sie uns
- per Telefon: +49 89 1894354-405
- per eMail: training@tfk.de oder
- über unsere Internet-Seite www.tfk.de/training

Sie erhalten von uns umgehend eine Bestätigung Ihrer Anmeldung oder können sich bei der Zusammenstellung der Kursinhalte beraten lassen.

Gern erstellen wir gemeinsam mit Ihnen ein Kurskonzept, das sich speziell an Ihren Anforderungen orientiert. Sie können verschiedene Themengebiete aus unseren Standard-Kursinhalten kombinieren und an Ihre firmenspezifischen Gegebenheiten anpassen lassen.