UMTS Core Network



Who Should Attend?

This course is aimed at technical staff, and anyone else who needs to understand UMTS and GPRS Common Core Network Architecture.

Course Scope

- 1. Introduction to UMTS Core Network.
 - UMTS Introduction.
 - Evolution of the UMTS Core Network.
 - UMTS Specifications.
 - General Network Architecture.
- 2. Release 1999.
 - Introduction.
 - Network Architecture.
 - CS (Circuit-switched) Core Network Nodes.
 - PS (Packet-switched) Core Network Nodes.
 - Common Core Network Nodes.
 - GTP (GPRS Tunnelling Protocol).
 - Traffic Cases.
- 3. Release 4.
 - Introduction.
 - MSC Server and Media Gateway.
 - ∘ BICC.
 - ∘ H.248/MEGACO.
 - Traffic Cases.
- 4. Release 5.
 - Introduction.
 - Network Architecture.
 - HSS.
- 5. IP-Multimedia CN Subsystem (IMS).
 - Nodes and Interfaces.
 - ∘ SIP.
 - SDP.
 - Traffic Cases.
- 6. Quality of Service.
 - Architecture.
 - Protocols.
- 7. Security.
 - Traffic Cases.
- 8. IMS Services.
- 9. Quality of Service.

Course Objectives

UMTS Core Network



This course provides the participants with more advanced knowledge of UMTS and GPRS core network infrastructure and functionality. It describes the interfaces and interface protocol structure involved in communication within UMTS Core Networks, and gives examples of UMTS traffic, focusing on communication in UMTS/GPRS Core Networks.

Prerequisites

Participants should have basic knowledge of UMTS architecture and communications in Telecom networks.

Training Structure

Two-day training divided into logical sessions.

Methodology

Instructor-led training.