MCNS Training Program

5GC Overview

5GC Overview

5GC Overview will offer delegates a good understanding on 5G core network evolution (5GC), Network function virtualization (NFV), network slicing, use case examples and 5GC functional entities

COURSE REVIEW

This 5G training course will introduce audience into **5G core evolution technology** making clear to the audience the necessity for **5G NFV** functions and network slicing. The **5G core network functionality** will be thoroughly described and explained together with the **slicing-Virtualization** and **SDN functionality** and architecture. Finally the connection of **5GC** to **NR RAN architectures** will be discussed.

AIMED AT

5GC Overview is aimed at a technical audience and/or managers. It is suitable for technical professionals, **5G system architects**, Research Institutes, defense sector, who are involved in **5G deployment** and would like to have a concise introduction on **5GC (5G-core) architecture**. It might be also a good topic for **technical managers** wishing to get some insight into the 5G core technology and the reasons behind **network slicing** and **NFV**.

Prerequisites: Those wishing to follow this course should have a general background into **LTE and 5G technology** with some core network basic understanding.

5GC Overview

5GC Overview will offer delegates a good understanding on 5G core network evolution (5GC), Network function virtualization (NFV), network slicing, use case examples and 5GC functional entities

Course Benefits for individuals (Professionals)

•Evaluate implementation options for **5GC**
•Build knowledge of a 5GC comprehensive set of technology / deployment scenarios.
•Understand the evolution steps from **EPC to 5GC**
•Feel confident about the **5GC to NR RAN** interconnection and architectures
•Identifying the use case behind network slicing and NFV
•Confidence to set expectation to better evaluate 5G core system architect solutions in terms of commercially viability, reliability, risk and strategy

Course Benefits for your Organization

•Equip organization engineers with the necessary knowledge of **5GC architecture**
•Develop skills aligned with the expected **5G core industry** direction, taking into account the latest technology developments and initiatives
•A solid foundation on which to build organizational competency core development plans to ensure **5GC opportunities**
•Keep ahead of competitors in preparing your network for proper 5G core slicing deployments.
•Prepare for future core network expansions towards **6G**

Training Format

Instructor-Led Training
On-Site Classroom: 1 day
Web delivered (Virtual): 1 day
Excellent and descriptive course material (pdf file) will be provided

Customer Tailored!

We can tailor the included topics, tech level, and duration of this course right to your team's technical requirements and needs

Course Program Outline

Module 1: 5G core overview

- 5GC standards

- NGMN and slicing proposal

- 5G new services

Module 2: 5G core evolution

- General 5G core concept

- EPC to 5GC evolution

- 5GC Network Deployment

- 5GC to RAN architecture

- 5G core System Architecture

- 5G EPC architecture

Course Program Outline

Section 2: 5GC core concepts

Module 3: 5G core functional description

- 5G core Functions

- AMF Functionalities

- UPF Functionalities

- SMF Functionalities

- AUSF Functionalities

- 5G Core Interfaces

Module 4: 5G Network slicing and NFV

- The Software Defined Networking (SDN) Concept

- OpenFlow Protocol

- Network Functions Virtualization (NFV)

- NFV Management and Orchestration

- Overview Network Slicing Architecture

- Use Cases and Slice Selection

- Resource Multiplexing and Isolation

- RAN Support of Slicing and RAN Sharing