This training provides a comprehensive overview on next generation 5G Cellular network evolutions planned from today to 2020.

Including main focus of standards bodies on future needs such as: Network Virtualization, Enhanced Broadband for Consumer devices, Emergency Services disaster requirements, low bandwidth high volume needs for industrial IoT..., with the challenges linked to securing these future services and subscriber data privacy.

At the end of the training you will:

- Understand the drivers, service requirements, and main use cases targeted by network evolution towards 5G
- Have a comprehensive overview of the key 5G concepts such as NFV, Slicing, Orchestration, Convergence...
- Be able to describe the main 5G security considerations and possible solutions
- Understand the 5G Standards 3GPP/ETSI organization, and their evolutions
- Have an overview of the planned USIM evolutions for 5G

Who should attend?
All people involved in 5G projects:

- Marketing Managers
- Project Managers
- Technical team
- SIM Manager
- VAS Manager
- Operational Team
- Security Managers
- …

Pre-requisites:
- No specific pre-requisites for this course. This course is held in English
5G Overview & Subscriber Security Essentials for Next Generation Networks

• Drivers for a 5th Generation communication networks

• Key use cases targeted by 5G [presentations & videos]

• Enabling future Services & Solutions – 5G Concepts
  • Main requirements for segments:
    - Massive IoT
    - Critical Comms
    - Enhanced Mobile Broadband
    - Network Operation Optimization
  • Existing technos Convergence with 5G: IEEE Wi-Fi, 3GPP LTE, 3GPP NB-IoT, Roaming...
  • 5G Infrastructure: Network Function Virtualization – Slicing/Orchestration, Mobile Edge Computing, Service-Based Architecture, ...

• Market impacts: New actors, roles, biz models

• Security considerations & Possible Solutions: Privacy, integrity, ...
  Solutions, legislation, Consumer impacts ...

• Standardization
  • Overview on 3GPP & ETSI standards for 5G,
  • Current Status & Deployment Roadmaps

• USIM evolutions in 5G
  • Subscriber privacy protection
    - Home Network Public Key storage
    - Subscriber identity confidentiality [SUCI, SUPI...]
    - Identity verification for Visited Networks (Lawful Interception...)
  • 5G Key Hierarchy & Storage resulting from 5G Authentications
  • ...