Course ID
LTESEC
Course Duration
2-3 days

Course Title
4G LTE / LTE-A Security Training

Related Courses

- LTE/LTE-A and 5G Wireless Training
- 5G Training: Security, D2D Support, Proximity Services, IoT, Advanced Features
- 5G Wireless Priority Services Training
- 5G Highlights Training
- 5G Wireless Technology/Applications

Aimed At

4G LTE / LTE-A Security Training is aimed at technical professionals in the commercial, homeland security, or defense sectors.

Prerequisites

4G LTE / LTE-A Security Training requires prior knowledge of 4G wireless such as may be acquired by taking one of our 4G LTE overview courses.

Course in a Nutshell

This course, *4G LTE / LTE-A Security Training*, undertakes a deep-dive into topics of interest to Defense and Homeland Security professionals including 4G Security Requirements, 4G Security Overview and Principles, 4G Security Architecture, 4G Security Procedures, 4G Encryption Methodologies, 4G Integration Protection Procedures, 4G/LTE Threat Modeling, and ISIM and eSIM in LTE. The topics that are part of this course are continually updated to synch with the evolving state-of-the-art of 4G and 5G Wireless.

Customize It!

We can tailor the included topics, tech level, and duration of *4G LTE / LTE-A Security Training* to your team's technical requirements.

Course Outline

LTE / LTE-A Security Training: 4G Security Requirements

- Security Business models in 4G
- Security threats for 4G
- UE Security Requirement
- eNB Security Requirement
- Core Network Security Requirement

LTE / LTE-A Security Training: 4G Security Overview and Principles

- 4G Security Termination Points
- Security in State Transition and Mobility

LTE / LTE-A Security Training: 4G Security Architecture

- 4G Security Infrastructure
- PHY Layer Security
- 4G RAN Security
- PDU Session User Plane Security

LTE / LTE-A Security Training: 4G Security Procedures

- 4G UE Authentication and Key Management
  - Authentication Framework
  - Authentication Procedures
- AKA Procedure & Key Hierarchy
  - Key Hierarchy
  - Key Derivation and Distribution
- Security Context
- NAS Security Mechanism
- RRC Security Mechanism
- Security Handling in Mobility

LTE / LTE-A Security Training: 4G Encryption Methodologies

LTE / LTE-A Security Training: 4G Integration Protection Procedures

LTE / LTE-A Security Training: 4G/LTE Threat Modeling

LTE / LTE-A Security Training: ISIM and eSIM in LTE

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