Fundamentals & Technology

2 days

Course Reference : T1019I
Webstore Reference :

Mastering UICC Cards for LTE Networks

Everything you need to know about UICC Cards, Technologies, Security & Services

UICC cards play a larger role today, than simply **securing access** to mobile networks. They are also used as standard, secure and **portable platforms** for personal data & **value added services** (VAS); remotely updateable in a standard & secure way "**Over-The-Air**" (OTA).

This training course will allow you to **easily understand** the main standards, technologies, features & security of these products. It will allow you to **analyze & manage** UICC cards using state-of-the-art tools.

At the end of the training you will

- Understand UICC card **functionality** to ease **analysis** of cards using card tools
- Have a clear overview on **security** mechanisms, and what **subscriber-related information** is stored in cards
- Understand the **concepts** & mechanisms around VAS **toolkit** technology
- Have a clear overview on the process & **security** around **OTA**, for remote management of UICC cards
- Benefit from real **field feedback** on what cards & services are currently deployed

Who should attend?

- SIM Manager
- VAS Manager
- Handset Validation Team
- Project Manager
- Developer Staff
- Roaming Manager
- Forensic Teams

Pre-requisites:

- Good basic knowledge on SIM & USIM cards

This course is held in English

Key topics

- SIM, USIM, UICC
- ETSI/3GPP SIM Standards
- PIN & EPS Authentication
- ISIM
- Toolkit & VAS
- OTA process & security
- OTA over HTTPs
- SIM Tools (admin & spy)

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Course Schedule

AT GEMALTO ON YOUR SITE

Day 1	Practicals & Demos
Introduction > Why LTE (drivers) > What additional services will it bring (IMS, RCS…) > Architecture of network, Voice, data, IMS, interconnection	
UICC for LTE > Introduction to UICC architecture (reminder) > Standards, existing & new ones > New features in the standard & what this can bring o File systems & new files o Additional Applications what for, how implemented o New Toolkit features, and possible services o New keys & Handset interaction o Authentication for EPS > Migration path to LTE "SIM" o SIM alliance recommendations > Inter-standard Roaming, balancing (3GGP / 3GPP2), new roaming files > Femtocells (Home (e)Node B) overview, features & UICC file(s)	- UICC Files browsing - Activation of LTE file services in UST - Roaming file wAcT settings - Access Conditions for User/Operator Femtocell files - Demo: Analyse boot phase with channel management & UST service activation Use case demo: "In Case of Emergency"

Day 2	Practicals & Demos
Understanding ISIM for Identification & Authentication on IMS > Introduction to ISIM & Voice (VoIP) - SMS in LTE > ISIM authentication and Implementation > ISIM basic files, additional files & functionality > Logical channel application selection > Other features: OTA provisioning of IMS User identities; RCS overview, GBA…	- ISIM Files browsing - Activation of ISIM additional services in IST - Connection parameter settings - Demo: Analyse boot phase with channel management
OTA for LTE (Remote Management over https) Overview > Introduction to move from SMS, BIP to https > Standards > Basic Architecture > Security concepts > Use cases: Remote Management of UICC	Demo of OTA sending APDU scripts over HTTPS

Some Examples of LEARNING PATHS:

- 3G operator moving to LTE: Above 2-day LTE training
- 2G Operator moving to LTE: "USIM in 3G Networks" 2-day training + above training
- CDMA Operator moving to LTE: "SIM, STK & OTA Basics" 2-day training + above USIM & LTE trainings
- New LTE operator ex Wimax operator: Same learning path as for CDMA operator

Contact us for more details