

A photograph of three people in an office setting. A woman with long dark hair, wearing a white sweater, is leaning over a computer monitor and smiling. A man in a maroon shirt is sitting at the desk, looking at the monitor and smiling. Another man in a light blue shirt is partially visible on the left, also smiling. The background is a brick wall.

Telecom Product & Technology Training Catalogue

“The fastest way to become operational”

Gemalto Product Training Department

July 2007

GEMALTO TELECOM TRAINING OFFER - A word from Olivier Piou



With well over a billion SIMs, USIMs and RUIs provided to mobile network operators' since the birth of modern digital wireless telecommunication systems, Gemalto is really experienced in the mobile telecoms market. We have a strong track record in providing our customers with field proven solutions to help raise revenue and create customer loyalty. These solutions are based on both our own products and services and those of our partners, with numerous different combinations of cards, software, personalization and services.

The role of Gemalto's training department is to communicate to your company, employees and partners on how smart card technology works, and how to get the most from its potential, in your specific environment, by delivering professional training.

We use well established teaching techniques to ensure the fastest way for our delegates to become operational. And help you discover SIM, USIM and RUI card environments, for a rapid practical launch of effective SIM-based services.

We have dedicated trainers to explore the full potential of these smart-card-centric products and services, to discover the maximum benefit from the products and solutions in the minimum amount of time, and efficient methods on product usage to simplify your day-to-day job.

We insist on quality in the design and delivery of our courses and rely on strong processes to ensure customer satisfaction

This catalogue lists the most extensive range of smart card training in the industry.

If you would like to find out more, please contact our sales team or visit us on-line at: www.gemalto.com/training

Gemalto is committed to providing excellent value for money and the best smart-card-based training around.

To make you and your company successful.

Olivier Piou
Gemalto CEO

Dedicated training teams and training centers

Dedicated Training Facilities

- ✦ Located in France, Mexico (Cuernavaca), or Singapore.
- ✦ Hotels & Restaurants close by offer the possibility to relax after a stimulating day of training.
- ✦ Next to Gemalto's main R&D facilities, with possibilities to visit our close-by production sites, and to organize meetings with local staff from marketing, product management, services, or other teams.
- ✦ With fully equipped rooms including integrated PCs in a quiet and discreet learning environment, away from the day-to-day bustle of the office.
- ✦ Travel & Accommodation assistance can be provided.

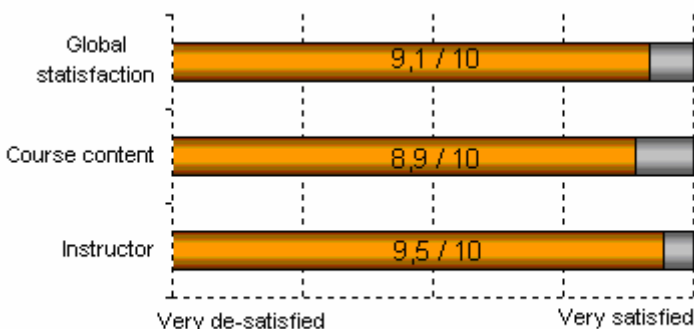


A dedicated training team:

- ✦ Dedicated trainers working closely with Gemalto analysts, R&D and development teams to continually update their market and technical product knowledge; ensuring that seminar delegates get the most from their Gemalto training experience.

Customer Satisfaction:

- ✦ Customer satisfaction is of utmost importance to Gemalto. We are always listening to our customers and feedback is retrieved through training evaluation, to ensure continuous improvement.



In 2006, our customer's satisfaction has been above 9 out of 10, with almost 800 people trained in 120 sessions, addressing more than 80 Mobile network key contributor companies.

Source Gemalto

A complete training offer for smart-card-based solutions & technologies



Value Added Services (VAS) are a key factor in the wireless market for increasing revenue and churn reduction. But imagining, creating and delivering new services requires in-depth knowledge of complex technologies, long development and implementation cycles. Gemalto can help you with high-quality training courses, to discover new possibilities, speed up time-to-market, and rapidly get the most from your solutions.

Benefit from Gemalto's professional team

Experience in wireless services

Each year, operators, infrastructure manufacturers and application development companies benefited from training at Gemalto or in-house.

Complete training offer

Includes fundamentals & technology, usage & administration, development & support courses.

Technologies covered:

SIM, USIM, RUIM, Java Card, OTA platform solutions, Security & Cryptography, Services development, etc

Who should attend:

Courses are adapted to specific audiences such as decision makers, project & SIM managers, administrators, developers, etc.

Adapted to your needs

Standard courses are regularly scheduled at Gemalto or on-site. Customized training adapted to your specific needs can also be proposed.

E-LEARNING offer



Learn about smartcards anytime, anywhere, with the Gemalto on-line e-learning offer on www.gemalto.com/training

All our web-based modules include animated presentations, commented by professional trainers, with demos and interactive quizzes, so you can measure your own progression.

E-Vouchers can be purchased on line from our webstore on Gemalto.com, or from your Gemalto representative.

Your e-voucher will give you a 1 year access.

See below, currently available courses:

Web Based Training	Validity
e-Learning	
SIM, STK & OTA Basics (e1001I)	1 year validity, Anytime, from Anywhere
USIM in 3G Networks (e1002I)	1 year validity, Anytime, from Anywhere
USIM Standards "Release 6" Evolutions (e10015S)	1 year validity, Anytime, from Anywhere

For more details or a free preview, visit us on www.gemalto.com/training/e-learning.html

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Fundamentals & technology



SIM & Mobile Services – a crash course

Objectives:

At the end of this course you will:

- ✦ Have an overview on VAS & related technologies
- ✦ Benefit from field experience on existing VAS solutions
- ✦ Understand issues for secure delivery
- ✦ Be able to evaluate future State-of-the-Art technologies & Services

Key Topics:

- ✦ USIM
- ✦ UICC
- ✦ SIM
- ✦ UICC & USIM
- ✦ 2G - 2.5G - 3G
- ✦ Java Card
- ✦ J2ME
- ✦ OTA
- ✦ Security & M-Commerce
- ✦ SIM Toolkit Applications

Who should attend:

- ✦ Marketing Staff
- ✦ Project Managers
- ✦ IT Managers



To provide an attractive Value-Added-Services (VAS) offer to your customers, you need to understand the important role of smart card technologies in their implementation, operation and security. Benefit from Gemalto's expertise in VAS design and long experience in the Wireless arena. This one-day seminar allows you to study recent wireless technologies to evaluate services already on the market, and understand forthcoming state-of-the-art technologies to imagine new kinds of services.

Each training session consists of:

- ✦ A complete course manual

Pre-requisites:

- ✦ None
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1
<p>Role of the SIM Card in Wireless Networks</p> <ul style="list-style-type: none"> ✦ Basic functions of the SIM ✦ Subscriber Identification & Authentication in the GSM network ✦ Basic services provided by the SIM ✦ Value Added Services (VAS) in the SIM <p>SIM Card Architecture, Operation & Applications</p> <ul style="list-style-type: none"> ✦ SIM card architecture ✦ Pre & post-issuance data overview ✦ Operation modes: GSM (Network connection); VAS with SIM Application Toolkit; Over-The-Air remote SIM access <p>Security in Wireless Networks</p> <ul style="list-style-type: none"> ✦ Security concepts: Identification, Authentication, Integrity, Confidentiality, Non-Repudiation ✦ Current Role of SIM card in Security: <ul style="list-style-type: none"> Card Holder Verification (PIN codes) Network Authentication & voice encryption OTA certification & encryption (Digital Signature) Mobile Commerce transaction proof ✦ Evolving Security Roles: PKI; WLAN <p>Technologies & Standards</p> <ul style="list-style-type: none"> ✦ Introduction to Main standards and governing organizations ✦ Main smart-card related technologies: SIM Toolkit, Java Card, SIM browsing, OTA ✦ Positioning of the technologies and related services ✦ Future proof services: Remote upgrade (Global Platform) ✦ Compatibility and interoperability: Development & deployment issues (SIM Toolkit, Java Card applets) <p>Today's Value Added Services: Examples and Benefits</p> <ul style="list-style-type: none"> ✦ Real-life examples of deployed services: Architecture and different actors ✦ Benefits for Network operators, subscribers, content providers <p>The Evolving Technologies & Services</p> <ul style="list-style-type: none"> ✦ Future developments in network and card-related standards & technologies: 3GDRMJ2ME & JCF ✦ Potential services and role of the smart card ✦ Multimedia & copyright issues ✦ Mobile vs Card-based applications

Related Courses:

<p>SIM & Mobile Services – A Crash Course (T1011S)</p>	<p>SIM, STK & OTA Basics (T1001I)</p>	<p>USIM in 3G Networks (T1002I)</p>
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Usage & Benefits of SIM Card for MVNO

Objectives:

At the end of this course you will:

- ✦ Understand the role of the SIM in a wireless environment for differentiation purposes
- ✦ Be able to optimize cost of operation, distribution & logistics
- ✦ Have an overview on Value-added-Services & their related technologies
- ✦ Benefit from field experience on existing VAS solutions
- ✦ Be able to evaluate future State-of-the-Art technologies & Services

Key Topics:

- ✦ SIM
- ✦ USIM / 3G
- ✦ SIM Application Toolkit & Value-Added-Services
- ✦ Distribution of SIMs & Services
- ✦ Handset provisioning
- ✦ OTA : Remote Management & Security
- ✦ ETSI – 3GPP Standards Overview

Who should attend:

- ✦ Marketing Staff
- ✦ Project Managers



As a Mobile Virtual Network Operator (MVNO), it is instrumental to differentiate your offer in a cost-efficient way. To achieve this, a key asset for you is the SIM & its related Value Added Services (VAS) and Applications; from distribution to VAS implementation. Gemalto offers you to benefit from its long experience & expertise in SIM cards.

This one-day seminar allows you to fully understand the role of the SIM in wireless environments and to evaluate services already on the market and key for MVNOs to achieve their objectives, also to understand forthcoming state-of-the-art technologies to imagine new kinds of SIM usages

Each training session consists of:

- ✦ A complete course manual

Pre-requisites:

- ✦ Understanding of the wireless market
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1
<p>Role of the SIM Card in your mobile environment</p> <ul style="list-style-type: none"> + Basic functions of the SIM + Subscriber Identification & Authentication in the GSM network + Basic Services provided by the SIM + Value Added Services (VAS) in the SIM <p>SIM Card Architecture, Operation & Applications</p> <ul style="list-style-type: none"> + SIM card architecture + Manufacturing: Pre & post-issuance data overview + Operation Modes & Security: <ul style="list-style-type: none"> - GSM (Network Authentication & Services) with a focus on MVNO specific services & features (SPN, Roaming) - VAS with SIM Application Toolkit - Securing VAS with the SIM Card - Over-The-Air (OTA) remote SIM management process <p>What you should know about Technologies & Standards</p> <ul style="list-style-type: none"> + Introduction to Main standards and governing organizations + Main smart-card related technologies: SIM Toolkit, Java Card, SIM browsing, OTA + Positioning of the technologies and related services + Future proof services: Secure Remote upgrades (OTA-Global Platform) + Compatibility and interoperability: Development & deployment issues (SIM Toolkit, Java Card applets) <p>Today's Value Added Services in SIM: Examples and Benefits</p> <ul style="list-style-type: none"> + Real-life examples of deployed services: Architecture and different actors <ul style="list-style-type: none"> - Benefits for operators, subscribers, content providers. - Ease of usage & maximisation of service uptake - Adapted Service Presentation to different market segments - Enriched voice services with SIM-based call management functions <p>How to optimise cost of Operation, Distribution & Logistics</p> <ul style="list-style-type: none"> + MySIMcopier: a means to capture easily new customers, turning competitor's churn into an advantage + SIM distribution to minimize logistic cost + IMEI tracking (for handset provisioning) + Self care profile: user personalization of card through your website + Outsourced OTA VAS & SIM management <p>Evolving Technologies & Services</p> <ul style="list-style-type: none"> + Future developments in network and card-related standards & technologies: 3G, J2ME & DRM + Potential services and role of the smart card <p>Conclusion</p>

Related Courses:

<p>Usage & Benefits of SIM Card for MVNO (T1014S)</p>	<p>SIM, STK & OTA Basics (T1001I)</p>	<p>USIM in 3G Networks (T1002I)</p>
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SIM, STK & OTA Basics

Objectives:

At the end of this course you will:

- ★ Have an overview of the main GSM SIM card standards.
- ★ Understand SIM card functionality.
- ★ Have an introduction on how “SIM Toolkit” applications work.
- ★ Be able to understand the “Over-The-Air” (OTA) process

Key Topics:

- ★ SIM
- ★ ISO 7816
- ★ GSM 11.11/ 3GPP 51.011
- ★ GSM 11.14
- ★ GSM 03.48 / 3GPP 23.048
- ★ SIM APPLICATION TOOLKIT
- ★ SMS & “OTA”
- ★ AUTHENTICATION

Who should attend:

- ★ Project Managers
- ★ IT Managers
- ★ System Implementers
- ★ Development Staff



Creating new services has until now required long development cycles and proprietary implementation. Using Java Card based SIM cards and Gemalto SIM Administration & Simulation Tools, based on the latest GSM standards, you can now work in-house, and transform ideas into applications in a matter of days.

This training course will allow you to rapidly get to know the main features of these products and begin managing your own applications

Each training session consists of:

- ★ A Complete course manual
- ★ Practical Exercises

Pre-requisites:

- ★ This course requires participants to have a basic knowledge of the GSM networks, as well as an electronic or computer background
- ★ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers
For on-site training, please contact us.



Course Schedule:

Day 1	Practice
<p>Trainees registration and training overview</p> <p>Gemalto in GSM Gemalto cards & software Gemalto services</p> <p>Understanding SIM Cards using GXXV3 cards GSM 11.11 standards</p> <ul style="list-style-type: none"> + Card architecture + Card life phases + Memory organisation + Access conditions + Security features + Special features + Command set <p>Understanding SIM Application Toolkit GSM 11.14 Standards</p> <ul style="list-style-type: none"> + SIM Toolkit definition + Use of STK applications 	<p>SIM Files browsing PIN management File creation</p>

Day 2	Practice
<ul style="list-style-type: none"> + SIM toolkit commands + SIM toolkit protocols <p>Remote management of services Introduction "Enhanced Short Messages" – GSM 23.048 "Enhanced SMS journey" for SIM cards Security features</p>	<p>STK application loading & testing with ADMIN & SIM software</p> <p>Mobile & network acknowledgement OTA testing using SIMu tools: Downloading securely GSM data Over-The-Air</p>

Related Courses:

<p>SIM & OTA Basics Course (T1001I)</p>	<p>JAVA SIM Card Administration Course (T1006A)</p>	<p>JAVA SIM Applet Development Course (T1007D)</p>
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USIM in 3G Networks

Objectives:

At the end of this course you will:

- ✦ Understand the basic technologies, features and standards for 3G systems.
- ✦ Understand the functionality of the USIM and difference with 2G cards.
- ✦ Manage the contents of the card, simulate 3G authentication and design advanced phonebooks

Key Topics:

- ✦ USIM
- ✦ UICC
- ✦ USAT
- ✦ CAT
- ✦ OTA
- ✦ Authentication, Milenage Algorithm
- ✦ GSM/3G INTERWORKING
- ✦ 3GPP & ETSI-SCP

Who should attend:

- ✦ Project Managers
- ✦ IT Managers
- ✦ System Implementers
- ✦ Development Staff



Since 3G is expected to become the dominant mode of communication system within the next couple of years, the USIM (Universal Subscriber Identity Module) implemented on the Gemalto 3G cards can be your passport to 3G networks.

This training allows you to understand and begin working on the USIM smart card application.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - GSM SIM cards
 - GSM 11.11 & 11.14 standards
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
Trainees registration and training overview Introduction to 3G <ul style="list-style-type: none"> ✦ Evolution of mobile communication systems ✦ Key points of 3G cellular System 3G Standards <ul style="list-style-type: none"> ✦ 3G Standards Organisations ✦ 3G Standards Documents Understanding 3G Cards (Part 1) <ul style="list-style-type: none"> ✦ UICC the 3G Card platform ✦ Physical, Elec. & trans. protocols Char. ✦ File System ✦ Commands ✦ Access conditions 	ADMIN & SIMu 3G Software Getting started GSM/3G file browsing Access conditions assignment File Creation

Day 2	Practice
Understanding 3G Cards (Part 2) <ul style="list-style-type: none"> ✦ USIM the 3G Application ✦ Security Features ✦ Authentication & Key Agreement (AKA) ✦ The 3G phonebook ✦ USAT (basics) ✦ OTA (basics) ✦ 3G/GSM interworking Introduction to migration path to 3G Questions & Answers session	3G milenage AKA Simulation 3G phonebook design with e-mail, groups, etc.

Related Courses:

SIM, STK & OTA Basics (T1001I)	USIM in 3G networks (T1002I)	JAVA 3G Card Administration (T1007A)	JAVA SIM Applet Development (T1007D)
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(U)SIM Standards Evolutions: Telecom “Rel-6”- Java Card - Global Platform

Objectives:

At the end of this course you will:

- ✦ Be able to state the main evolutions of Telecom Card ETSI-3GPP “Rel-6” standards
- ✦ Have an overview of the new smart card's: Java Card 2.2.1 & Global Platform 2.1.1 functionalities
- ✦ Understand the benefits that new products will bring to: deployment; administration; and evolution-proof issues
- ✦ Have examples of future services based on new standards and Gemalto card features

Key Topics:

- ✦ ETSI-3GPP Standards
- ✦ Global Platform 2.1
- ✦ Java Card 2.2 (RMI, Garbage Collector)
- ✦ UICC/SIM/USIM
- ✦ Toolkit
- ✦ “OTA”
- ✦ Logical Channels
- ✦ CAT-TP
- ✦ Advanced Services (Device Management, DRM, J2ME, Phonebook)



New SIM card standards & specifications naming and evolutions are often confusing and finding information, or anticipating new service opportunities becomes more & more difficult.

This training course will give you an overview on the new standards evolutions, soon to be released product features, and future service opportunities.

Who should attend:

- ✦ R&D Managers
- ✦ Project Managers
- ✦ IT Managers
- ✦ Development Staff

Each training session consists of:

- ✦ A Complete course manual

Pre-requisites:

- ✦ Understanding This course requires participants to have a working knowledge of: “Release 5” ETSI/3GPP/ GP
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Morning
Introduction
Major Evolutions of Telecom Card Standards + What are changes in standards versions: ETSI/3GPP/Global Platform/Java Card
Structure & Naming of New Card Standards + Java Card "2.2.1" Standards + Global Platform "2.1.1" Standards + ETSI/3GPP "Release 6" Standards
Implementation of Standards in Telecom Cards + File System & Administration + Toolkit features & API + OTA security and remote card administration + Java Card platform + Transport Protocol (CAT-TP)
Detailed Descriptions
New Java Card Features + Garbage Collector + Remote Method Invocation
New Global Platform Features + Extradition

Afternoon
UICC, SIM, USIM: NAA, File Systems & Admin + Create/Delete/Re-size APDU Commands + Large Files
New Toolkit Events & Proactive Commands + File Update/NAA Change... + Retrieve & Submit MM
Latest API Functions
New OTA Features + Transport Protocol (CAT-TP) + Security (MSL...) + Expanded Format

Related Courses:

USIM in 3G networks (T1002I)	USIM Standards Evolutions (T1015S)	JAVA 3G Card Administration (T1007A)	JAVA SIM Applet Development (T1007D)
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Understanding ISIM Cards for IMS Networks

Objectives:

At the end of this course you will:

- ✦ **Have a clear understanding of what is IMS**
- ✦ **Understand the Role that ISIM plays in an IMS**
- ✦ **Have real examples what can be done with IMS**

Key Topics:

- ✦ IMS
- ✦ ISIM
- ✦ TCP/IP
- ✦ SIP

Who should attend:

- ✦ Technical Marketer
- ✦ R&D Managers
- ✦ Project Managers
- ✦ IT Managers
- ✦ Development Staff



IMS is the network architecture that will shortly allow convergence between mobile and fixed networks. Understanding the overall architecture, protocol, and security around the ISIM smart card, will allow you to anticipate future service opportunities.

This training course provides an overview of the IMS network, including use cases and details on the role that the UICC plays

Each training session consists of:

- ✦ A complete course manual

Pre-requisites:

- ✦ Basic understanding of:
 - IP protocol
 - IP network
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Morning
Introduction
Services Offer via IMS
★ Presence Management
★ Media Switching
★ Caller add-on information
Gemalto value proposal
★ ISIM authentication
★ On card SIP user agent
★ Call processing repository
IMS Technologies
★ IMS role
★ IMS and mobility

Afternoon
IMS Technologies
★ IMS Network Components
★ IMS Protocols
★ SIP
IMS and UICC standardisation

Related Courses:

USIM Standards Evolutions (T1015S)

Understanding ISIM Cards for IMS Networks (T1016S)

Understanding BIP

Bearer Independent Protocol

Objectives:

At the end of this course you will:

- ★ Have a clear understanding of the new capacity of data exchange using BIP & CAT-TP standards
- ★ Understand the BIP & CAT-TP implementation in the Gemalto cards
- ★ Have examples of data communication between a server and a card

Key Topics:

- ★ BIP & CAT-TP Standards
- ★ GPRS/UMTS
- ★ UDP/IP
- ★ Toolkit
- ★ SDU/PDU
- ★ Segmentation
- ★ CAT-TP security layer

Who should attend:

- ★ R&D Managers
- ★ Project Managers
- ★ IT Managers
- ★ Development Staff



Over-the-Air access to USIM cards has relied on the low-bandwidth SMS channel for several years. With the standardised BIP protocol, faster data exchanges can be made to access card content.

This training course will give you an overview of the BIP and CAT-TP standards, and how this new high speed packet protocol will help download applications & remotely manage your card content more efficiently

Each training session consists of:

- ★ A complete course manual

Pre-requisites:

- ★ GSM SIM cards
- ★ Toolkit mechanism
- ★ Over The Air mechanism & security
- ★ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Morning
<p>Introduction</p> <ul style="list-style-type: none"> ✦ What is BIP & CAT-TP? ✦ Naming of Card Standards dedicated to BIP ✦ Key benefits for network operators <p>The BIP communication</p> <ul style="list-style-type: none"> ✦ Proactive commands and events ✦ BIP buffers ✦ Open & close channel ✦ Send & receive data <p>CAT-TP</p> <ul style="list-style-type: none"> ✦ CAT-TP messages ✦ Opening a CAT-TP session ✦ What is the segmentation ✦ Sequence and acknowledgement number ✦ Re-transmission and time-out mechanisms ✦ Window management

Afternoon
<p>Secured packet</p> <ul style="list-style-type: none"> ✦ How to secure your CAT-TP messages <p>The PUSH mechanism + RAM + RFM</p> <ul style="list-style-type: none"> ✦ The Push mechanism to open a BIP channel from the platform ✦ The available commands for RAM & RFM <p>Configuration</p> <ul style="list-style-type: none"> ✦ How to configure the EF GPRS <p>Performances</p> <ul style="list-style-type: none"> ✦ BIP performances vs SMS <p>Mobiles</p> <ul style="list-style-type: none"> ✦ Available mobiles on the market

Related Courses:

USIM Standards Evolutions (T1015S)	Understanding BIP (T1017S)	OTA Platform Introduction & Usage (T1003I)	OTA Platform Administration (T1004A)
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Understanding Smart Card Web Server Technology

Objectives:

At the end of this course you will:

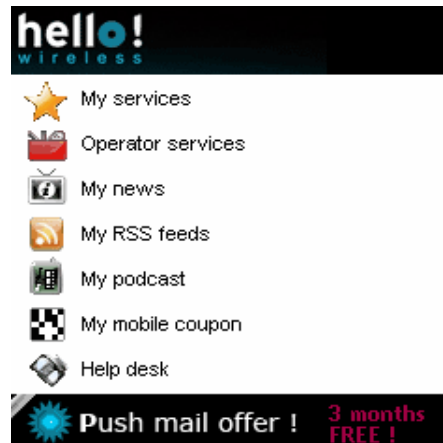
- ★ **Have an overview on SCWS technology, how it works & what it's used for**
- ★ **Understand the card & network architecture and associated standards for an SCWS solution**
- ★ **Have an overview of remote management of SCWS content**
- ★ **Be able to describe examples of SCWS use cases**

Key Topics:

- ★ Smart Card Web Server
- ★ On Card Portal
- ★ Remote Card Administration over TCP-IP
- ★ OMA, ETSI Standards
- ★ SCWS & Card Memory (NAND...)
- ★ Servlet customisation overview

Who should attend:

- ★ Marketing Staff
- ★ Project Managers
- ★ IT Managers



Boost service usage via a user-friendly interface allowing service discovery and easy access to content. Operators now have the opportunity to present all their services, from whichever location (network or local), in the same place, thanks to the Smart Card Web Server (SCWS) technology. This one day seminar will allow you to understand what we can do with this technology, how the solutions can be implemented, and gives examples of real-life use cases.

Each training session consists of:

- ★ A complete course manual
- ★ Demonstrations

Pre-requisites:

- ★ A basic knowledge of mobile networks would be useful
- ★ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Contactless & NFC Basics

Objectives:

At the end of this course you will:

- ★ Have an overview of NFC (Near Field Communication) use cases, architectures, requirements.
- ★ Learn the various contactless technologies (mifare, type A, type B, felica) and RFID (ISO 15693)
- ★ Have a clear vision of the security requirements
- ★ Understand the Over The Air personalization

Key Topics:

- ★ Contactless technologies
- ★ NFC (Near Field Communication)
- ★ OTA
- ★ RFID
- ★ Co-operation between mobile operators, transport and banks.
- ★ Global platform
- ★ Security
- ★ Standardization

Who should attend:

Bank, Telecom, transport staff:

- ★ Marketing Managers
- ★ Project Managers
- ★ Technical team just assigned to NFC and want an introduction



Mobile Contactless offers new opportunities to mobile operators, banks, transport companies and other service providers.

This training will help mobile operators and service providers to better understand the ecosystem and solutions available for proper deployment.

Each training session consists of:

- ★ A complete course manual

Pre-requisites:

- ★ This course requires participants to have a basic knowledge on telecommunications, banking or transport applications.
- ★ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1
<p>Introduction to NFC</p> <p>NFC use cases</p> <ul style="list-style-type: none"> ★ card emulation mode ★ reader mode ★ P2P mode <p>Overview of the contactless market in transportation, payment, identity, access control</p> <p>Contactless technologies</p> <ul style="list-style-type: none"> ★ ISO 14443 type A, mifare® ★ ISO 14443 type B, B' ★ Felica <p>RFID: difference between NFC and ISO 15693?</p> <p>Possible architectures for Mobile contactless</p> <ul style="list-style-type: none"> ★ Embedded secured element ★ SIM card ★ Removable secured element ★ Role of HCI (host controller interface) <p>Multi application architecture</p> <ul style="list-style-type: none"> ★ Global Platform ★ OTA management: requirements, challenges, roles and responsibilities <p>Security requirements</p> <ul style="list-style-type: none"> ★ transport ★ payment ★ other applications <p>Standardization status</p> <ul style="list-style-type: none"> ★ NFC forum ★ ETSI ★ GP <p>Outlook of the NFC deployments</p> <ul style="list-style-type: none"> ★ Overview of the current NFC pilots ★ Examples of Japan and France <p>On Request, the training can be customized for banking, transport or telecom sector.</p>

Related Courses:

Global Platform 2.1.1 for contactless cards (T1004I)	NFC Basics (T1005I)	Understanding Smart Card Web Server Technology (T1016S)
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Global Platform 2.1.1

Objectives:

At the end of this course you will:

- ✦ Understand what the **Global Platform 2.1.1 functionalities** are.
- ✦ Understand how the **different actors (Mobile Operator, MVNO, Bank, and Transport Operator) can share the same card.**
- ✦ Have an overview of the **telecom card architecture**
- ✦ Understand how to **access this card and its applications 'Over The Air'**

Key Topics:

- ✦ Multiapplication Card
- ✦ OTA "Over The Air"
- ✦ SCP
- ✦ Security Domain / ISD
- ✦ Delegated management
- ✦ DAP verification
- ✦ Mandated DAP verification

Who should attend:

Bank, Telecom, transport staff:

- ✦ Project Managers
- ✦ Security Managers
- ✦ SIM managers
- ✦ System developers



Mobile contactless requires trusted co-operation between mobile operators, banks, transport companies and other service providers.

The multi-player and multi-application nature makes it essential to provide high levels of security and trust between parties.

Each training session consists of:

- ✦ A complete course manual

Pre-requisites:

- ✦ This course requires participants to have technical knowledge on smart cards or on payment system applications
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

Course Schedule:

Day 1
<p>Telecom Card</p> <ul style="list-style-type: none">★ Architecture of a telecom card★ File system and commands★ Access conditions & pin system★ Toolkit commands
<p>Global Platform 2.1.1</p> <ul style="list-style-type: none">★ Introduction and standards history★ Actors and Business cases<ul style="list-style-type: none">○ Delegated management○ DAP verification○ Mandated DAP verification★ Few words about GP systems★ GP cards internals★ ISD and SDs★ Other applets and SD association★ Key management★ Secure Channel Protocols★ Card content management★ GP2.1.1 registry
<p>Telecom Card</p> <ul style="list-style-type: none">★ SMS Header & Security★ Remote applet & file management

Related Courses:

**Global Platform
2.1.1 for
contactless cards
(T1004I)**

**NFC Basics
(T1005I)**

Mobile Television

When broadcasting, mobile TV requires a high level of security

Our Mobile-TV solution enables mobile operators to position with differentiating values and offers such as secure access to digital TV, management of menus & contents and interactive services

Mobile-TV (m-TV) now captivates end-users worldwide and currently represents a significant potential business model value for mobile operators. This technology requires a high level of security for mobile operators to act as new pay-TV players. To address this need, Gemalto proposes a m-TV solution with SIM- based Conditional Access (CA).

> The m-TV technology

Two main options are available in adopting m-TV: one is based on the UMTS network and the other on Broadcast, which is dependent on country regulation as well as on the choice of m-TV standards.

- A m-TV solution based on the UMTS network offers a point to point technology but can be high bandwidth capacity consuming, thus limiting the contents and the number of simultaneous channels.
- An alternative to this is broadcast using a USIM-based solution as CAS (Conditional Access Solution) or MBMS (Multimedia Broadcast Multicast Service), which offers operators a wider range of possibilities.

> The USIM's key role in m-TV multimedia services

Whatever the broadcast technology, m-TV multimedia services require the highest level of security. Broadcasters for example already use a security scheme based on smart card technology for Pay-TV while operators control the USIM. The USIM thus plays a key role in this business, ensuring security access to digital broadcast mobile pay TV program through Conditional Access and brings innovative high value added services to operators.



> The Gemalto versatile m-TV solution

By hosting mobile pay-TV applications on the USIM, the Gemalto solution, compliant with standard, allows operators and broadcasters to safely enter the m-TV world. It empowers the operator to effectively position itself with a differentiating business model and interactive multimedia services (content downloading and voting, among others). Within the Gemalto solution, OTA services are used to their full advantage in order to manage user rights and permits to maintain security level over time. The Gemalto mobile TV solution:

- Administers and stores connectivity settings for service access
- Manages services security: delivers user permissions, hosts rights, generates decryption key, hosts e-purses for impulsive pay-per-view or pre-paid offers
- Offers support for dynamic end-user profile and direct marketing campaigns through "Electronic Service Guide"
- Assures management of unified ESG graphical user interface presentation
- Securely upgrades mobile TV services (OTA capability for security, flexibility and delivery)

> Operator benefits

- Gemalto m-TV solution is fully handled by the operator
- Control of revenues and user interface, and others
- Maintain security over time via OTA
- Generic and portable
- New business models: impulsive, free preview, pre-loaded
- Pay-TV proven solution experience
- Evolution towards DRM
- Network bandwidth savings

> End-user benefits

- Unified presentation, easy access and use
- User interface personalization
- ESG controlled by the SIM
- Interactive services (e.g: voting)
- Secure recording of m-TV in video, privacy
- Easy transfer and exchange with the PC

> OTA Technology

- From "point to point technology" (GPRS, EDGE, UMTS) to digital broadcast technologies (DVB-H, T-DMB, MBMS, etc.)

> Standards

- ETSI DVB-CBMS (Open Security Framework)
- ETSI 3GPP (MBMS)
- OMA Bcast (Smart Card Profile)

The Gemalto mobile-TV solution integrates Conditional Access System (CAS) and Electronic Service Guide (ESG) applications from partners.

In 2006, Gemalto launched in Italy the first USIM-based mobile TV solution using the DVB-H technology.



To understand the standards, the different solutions available and why the security of the smart card has to be enhanced for M-TV smartcards, a 1 day **workshop** can be organized at your premises or on Gemalto offices.

Course Schedule Abstract :

Day 1
Standards overview <ul style="list-style-type: none"> + ETSI DVB-CBMS (Open Security Framework overview) + ETSI 3GPP (MBMS) + OMA Bcast (Smart Card Profile)
Why the security of the smart card has been enhanced <ul style="list-style-type: none"> + The new Smart Card security features
Manufacturing process

At the end of this course you will:

- Understand the standards involved in M-TV.
- Have an overview of the different solutions available.
- Understand why the security of the smart card has to be enhanced for M-TV.
- Understand the new business models.

Related Courses:

USIM in 3G networks (T1002I)	Mobile TV (T1019S)	Understanding SCWS Technology (T1018S)	Understanding ISIM Cards for IMS Networks (T1016S)
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Usage & administration



Java SIM Card Administration

Objectives:

At the end of this course you will:

- ✦ Understand JavaCard, 23.048 and Global Platform specifications,
- ✦ Understand the STK applet development process,
- ✦ Manage the JavaCard based SIM Cards and the associated security

Key Topics:

- ✦ Applet
- ✦ Java Card Virtual Machine
- ✦ Over the Air security
- ✦ Remote File Management
- ✦ Remote Applet Management
- ✦ Secure Channel

Who should attend:

- ✦ Project managers
- ✦ SIM manager
- ✦ Development staff

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises



Creating new services has until now required long development cycles and proprietary implementation. Using Java Card based SIM cards and Gemalto SIM Administration & Simulation Tools, based on the latest GSM standards, you can now work in-house, and transform ideas into applications in a matter of days.

This training course will allow you to rapidly get to know the main features of these products and begin managing and testing your own applications

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - ✦ - a basic knowledge of the GSM standards 11.11, 11.14 (SIM Toolkit), 03.48.
 - ✦ - It is strongly recommended that you follow the "SIM, STK & OTA Basics" course before attending this course
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers
For on-site training, please contact us.



Course Schedule:

Day 1	Practice
<p>Trainees registration and training overview</p> <p>Introduction Gemalto offer</p> <ul style="list-style-type: none"> + SIM card architecture + Applet development + Software development <p>Javacard based smart card</p> <ul style="list-style-type: none"> + Introduction + Architecture + Applet management + Security + JavaCard Based SIM Card 	<p>Follow applet process development, from a java file to an applet in the card</p>

Day 2	Practice
<p>STK and Javacard based SIM card</p> <ul style="list-style-type: none"> + STK reminder + GSM application + Event management, + Proactive commands <p>Remote Management</p> <ul style="list-style-type: none"> + General Card Architecture + RAM, RFM, CM, Security Domain <p>Management commands (23.048 & GP)</p>	<p>Test a basic STK applet. Test applet with different STK Events</p> <p>Manage secure applet downloading: personalise the security of your OTA message /Java SIM Card.</p> <p>Simulate the OTA communication chain, from the Server to the card</p>

Related Courses:

SIM, STK & OTA Basic (T1001I)	Java SIM Card Administration (T1006A)	Java SIM Applet Dev (T1007D)
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Java 3G Card Administration

Objectives:

At the end of this course you will:

- ✦ Understand USIM Java Card Architecture & Security,
- ✦ Be able to load and test card applications using the Gemalto software tools.
- ✦ Understand how to manage 2G/3G files and applets Over The Air (OTA)

Key Topics:

- ✦ Native to Java Card Migration
- ✦ Global platform
- ✦ UICC/USIM/SIM APIs
- ✦ OTA concept
- ✦ 3GPP TS 23.040
- ✦ 3GPP TS 23.048
- ✦ Remote File Management
- ✦ Remote Applet Management
- ✦ Applet download

Who should attend:

- ✦ Project managers
- ✦ SIM manager
- ✦ Development staf



Be ready to launch your 3G commercial card-based services thanks to this 2 day training session including many practical sessions.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - GSM standards (“SIM, STK, OTA Basics” training recommended)
 - 3G standards (“USIM in 3G networks” training recommended)
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
<p style="text-align: center;">Fundamentals of Telecom Java Card</p> <p>Introduction</p> <p>Applet definition</p> <ul style="list-style-type: none"> + Package-Instance-Class <p>Java Card in a nutshell</p> <ul style="list-style-type: none"> + JCRE - Virtual machine – APIs - interoperability 	<p>Explore the architecture of a Java USIM card</p>
<p style="text-align: center;">Card Content Management</p> <p>Global platform</p> <ul style="list-style-type: none"> + Card Manager - Security Domain - Secure Channel 	<p>Applet Management</p>

Day 2	Practice
<p style="text-align: center;">Card Content Management</p> <p>Text SMS</p> <ul style="list-style-type: none"> + SMS 23.040 Concepts <p>Data SMS</p> <ul style="list-style-type: none"> + 23.048 Secured Packets - Transfer Mechanism <p>Remote File Management</p> <ul style="list-style-type: none"> + GSM files - 3G files - Command set <p>Remote Applet Management</p> <ul style="list-style-type: none"> + Principle - Command Set <p>Download and installation of 3G Applet</p> <ul style="list-style-type: none"> + GSM parameters - Access conditions 	<p>23 048 management</p> <p>Manage minimum security level</p> <p>Select, Read, Update GSM & 3G files OTA</p> <p>Delete applets and retrieve memory amount</p> <p>Download a STK applet</p>

Related Courses:

SIM, STK & OTA Basics (T1001I)	USIM in 3G networks (T1002I)	JAVA 3G Card Administration (T1007A)	JAVA SIM Applet Development (T1007D)
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Java R-UIM Card Administration

Objectives:

At the end of this course you will:

- ✦ Know how to use the card administration tools to manage & help validate R-UIM Card profiles.
- ✦ Understand which files are needed to perform the CDMA authentication mechanism.
- ✦ Understand which files are needed to perform GSM roaming and the GSM authentication mechanism.
- ✦ Be able to load R-UIM Toolkit applets using the Admin tool.

Key Topics:

- ✦ R-UIM File Systems & Commands
- ✦ File Security (Access Conditions)
- ✦ SIM Java Card Architecture
- ✦ Toolkit Applet Management

Who should attend:

- ✦ Project managers
- ✦ R-UIM manager
- ✦ Validation teams
- ✦ Developers



Optimise the management of your R-UIM cards to ease the commercial launch of CDMA cards & their services.

This 2-day training session includes many practical sessions with CDMA Cards & Card administration tool

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a working knowledge of the following technologies:
 - 3GPP2 standards: C.S0023 recommended
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

Course Schedule:

Day 1	Practice
<p>Introduction to CDMA</p> <ul style="list-style-type: none"> + CDMA Technology + Standards + R-UIM within CDMA networks <p>What is an R-UIM</p> <ul style="list-style-type: none"> + SIM card Architecture + Subscriber Identification & Authentication on the CDMA network <p>Mastering the R-UIM</p> <ul style="list-style-type: none"> + GemXplore Admin Tool with CDMA option + Adding an Applet to the R-UIM <p>What is possible Over The Air</p> <ul style="list-style-type: none"> + OTAF (OTA-SP/PA) mechanism explanation <p>What is possible Over The Air</p> <ul style="list-style-type: none"> + OTAF (OTA-SP/PA) mechanism explanation <p>R-UIM Card File Systems, Access Conditions, File Content</p> <p>R-UIM based CDMA services</p> <ul style="list-style-type: none"> + E-Video mechanism explanation 	<p>Explore & Manage the files and content of R-UIM cards</p> <p>Test the authentication method of the card and the CDMA network</p> <p>Explore the architecture of a Java card</p> <p>Delete applets and retrieve memory amount</p>
Day 2	Practice
<p>Introduction to GSM</p> <ul style="list-style-type: none"> + 2G GSM Technology + 2G Standards <p>SIM structure & GSM</p> <ul style="list-style-type: none"> + SIM card Architecture + Subscriber Identification & Authentication on the GSM 2G network <p>Roaming between CDMA & GSM</p> <ul style="list-style-type: none"> + Know the constraints <p>SIM Card File Systems, Access Conditions, File Content</p> <p>SIM based GSM services</p> <ul style="list-style-type: none"> + Browsing Dynamic content 	<p>Explore the GSM file system</p>

Using Admin & Simulation Tools for SIM Card Management

Objectives:

At the end of this course you will:

- ✦ Know how to use Admin software tools to manage & help validate (U)SIM Card profiles
- ✦ Be able to load and test (U)SIM Toolkit applets using Admin/(U)SIMu tools.
- ✦ Be able to simulate the secure management of 2G/3G files and applets Over-The-Air (OTA)

Key Topics:

- ✦ (U)SIM File Systems & Commands
- ✦ File Security (Access Conditions)
- ✦ UICC/USIM/SIM
- ✦ Java Card Architecture
- ✦ Toolkit Applet Management & Testing
- ✦ OTA Secure Card Management Simulation
- ✦ 3GPP TS 23.048
- ✦ Remote File Management
- ✦ Remote Applet Management

Who should attend:

- ✦ Project managers
- ✦ (U)SIM manager
- ✦ Validation teams
- ✦ Development staff



Optimise the management of your (U)SIM cards to ease the commercial launch of 2G & 3G cards & their services.

This 2-day training session includes many practical sessions with SIM Card ADMIN & SIMulation Tools

Each training session consists of:

- ✦ A complete course manual
- ✦ Many practical exercises

Pre-requisites:

- ✦ This course requires participants to have a working knowledge of the following technologies:
 - ✦ GSM standards: 11.11, 11.14, 03.48 (“SIM, STK, OTA Basics” training recommended)
 - ✦ 3G standards (“USIM in 3G networks” training recommended)
 - ✦ Java SIM Card Architecture & Security (“Java SIM Card Administration” training recommended)
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

Course Schedule:

Day 1	Practice
Role of the SIM Card in your mobile environment <ul style="list-style-type: none"> ✦ Basic functions of the SIM ✦ Subscriber Identification & Authentication in the GSM network ✦ Basic Services provided by the SIM ✦ Value Added Services (VAS) in the SIM (U)SIM Card File Systems, Access Conditions, File Content <ul style="list-style-type: none"> ✦ Practical 1: Using tools for 2G File Management ✦ Practical 2: Using tools for 3G File Management & Advanced Phone Book ✦ Practical 3: Generate APDU scripts, File Content Reports & Card Typing for non-Gemalto cards (U)SIM Java Card Architecture & Applets <ul style="list-style-type: none"> ✦ Practical 4: Card Applet scanning 	<ul style="list-style-type: none"> - Explore & Manage the files and content of (U)SIM cards - Generate Content Reports - Card typing for non-Gemalto cards - Explore the architecture of a Java (U)SIM card

Day 2	Practice
STK Applet Management & Installation Parameters <ul style="list-style-type: none"> ✦ Practical 5: SIM Toolkit applet loading & Testing OTA Security for remote card management <ul style="list-style-type: none"> ✦ Practical 6: Test 23.048 parameters with OTA simulation tools Remote Managers (RFMs & RAM) <ul style="list-style-type: none"> ✦ Practical 7: Remote File & Applet management using OTA tools 	<ul style="list-style-type: none"> - Applet Management: Download an STK applet - 23 048 management - Manage minimum security level - Select, Read, Update GSM & 3G files OTA - Delete applets and retrieve memory amount

Related Courses:

SIM, STK & OTA Basics (T1001I)	USIM in 3G Networks (T1002I)	Java 3G Card Administration (T1007A)	Using Admin & SIMu Tools for SIM Mngment (T1016A)
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OTA Platform Introduction & Usage

Objectives:

At the end of this course you will:

- ✦ **Deliver Services to subscribers**
- ✦ **Perform SIM Card updates**
- ✦ **Schedule Campaigns and issue multiple updates**
- ✦ **Schedule with the XCT¹ the Campaigns and issue multiple updates**
- ✦ **Download Applet on (U)SIM Card**

Key Topics:

- ✦ What is over-the-air?
- ✦ Submitting a service request
- ✦ Monitoring service requests
- ✦ Viewing SIM card content
- ✦ Managing campaigns
- XCT

Who should attend:

- ✦ Customer Service Managers
- ✦ Customer Care Agents

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises



Giving your subscribers after sales satisfaction is the key to the future of your business. Having dedicated Customer Care agents operating your Over The Air (OTA) platform means that you have a strong and continuous connection with them. What is needed is a course on Usage principles and to give practical advice on the platform and the services held within it.

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - GSM SIM Card Structure
 - ETSI & GSM Standards
- ✦ This course is held in English

Duration:

1,5 Days
Please, take this brochure as an example.

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers
For on-site training, please contact us.

¹ The XCT module are an extra half a day and only included, if you have them installed on your platform and bought the necessary licenses



Course Schedule:

Day 1	Practice
Introduction/Overview <ul style="list-style-type: none"> + What is OTA Submit a Service Request <ul style="list-style-type: none"> + Submit the different services within your OTA platform and view the results Monitor Service Requests <ul style="list-style-type: none"> + Follow the history of your requests + Understand what may have gone wrong View SIM Card Content <ul style="list-style-type: none"> + View a Subscribers SIM Details in the OTA platform Applet	Send a SMS Text to a (U)SIM Card Send an Update File to a (U)SIM Card Analyze the result of the previous sending Consult the test (U)SIM Card Create and schedule a campaign Load an applet on a (U)SIM Card
Day 2	Practice
Campaign Management <ul style="list-style-type: none"> + How to build a successful campaign + How to specify the delivery period for a Campaign + Follow the status of the campaign in progress + Create reports of the campaign XCT Specifics	Create and schedule a campaign

Related Courses:

SIM & OTA Basics Course	Understanding BIP (T1017S)	OTA Platform Introduction and Usage Course (T1003I)	OTA Platform Administration Course (T1004A)	OTA Platform Advanced (T1017A)
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OTA Platform Administration

Objectives:

At the end of this course you will:

- ✦ **Administrate & maintain a fully functional OTA platform.**
- ✦ **Control and Manage the multiple users on the platform**
- ✦ **Manage the security features of your subscribers.**

Key Topics:

- ✦ Architecture
- ✦ File Structures
- ✦ Security & Management
- ✦ Subscribers & SIM Cards
- ✦ OTA Services
- ✦ Applet Repository

Who should attend:

- ✦ System Administrators
- ✦ SIM Managers
- ✦ Telecom Operators
- ✦ Customer Service Managers



Having an Over The Air (OTA) platform, is your gateway as a Telecom Operator, for supplying Value Added Services (VAS) to your many existing subscribers and also gaining new ones. Keeping your OTA system running at its optimum performance level is a must. With downtime and system hang ups always being a major concern, what is needed is a course on administration principles and to give practical advice on the OTA platform.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - Unix
 - Oracle
 - GSM SIM Card Structure
 - ETSI & GSM Standards
- ✦ This course is held in English

Duration: 1,5 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers
For on-site training, please contact us.

Dynamic STK Platform Administration

Objectives:

At the end of this course you will:

- ✦ **Administrate & maintain a fully functional S@T platform.**
- ✦ **Control and manage the multiple services delivered by the platform.**
- ✦ **Manage the users who access the platform.**

Key Topics:

- ✦ Architecture
- ✦ File Locations
- ✦ User Management
- ✦ Service Management & Deployment
- ✦ Sending a "Push" Service
- ✦ Billing Information

Who should attend:

- ✦ System Administrators
- ✦ SIM Managers
- ✦ Telecom Operators



Being able to deliver "on-demand" services to your subscribers is the next item in the chain of Value Added Services (VAS). This course shows you how to set-up and add services onto your S@T portal, giving you a more diverse tool to communicate with the S@T browser housed inside your predefined SIM Card.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - Unix
 - Oracle
 - GSM SIM Card Structure
 - ETSI & GSM Standards
 - XML or HTML
- ✦ This course is held in English

Duration: 1 Day

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

Device Management Platform Administration

Objectives:

At the end of this course you will:

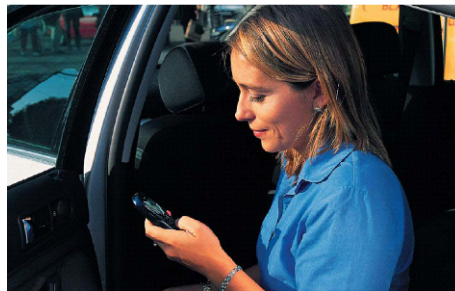
- ✦ **Manage the handset configuration of your subscribers**
- ✦ **Provision the platform**
- ✦ **Configure & monitor the platform**
- ✦ **Manage the different platform user types**

Key Topics:

- ✦ Configuration of Mobile Data Services
- ✦ Over the Air (OTA) Configuration
- ✦ Automatic Device Detection & Configuration
- ✦ Platform Supervision & Maintenance

Who should attend:

- ✦ Telecom Operators
- ✦ Customers Service Representatives
- ✦ System Administrators



Addressing your customers' needs regarding hassle-free and reliable mobile phone configuration is a major concern. Device Management is a state-of-the-art platform, which quickly and effectively manages device configuration settings Over The Air (OTA), so that end-users can use straight away your value-added data services without worrying about how to configure their mobile phone. With all this in mind, this course covers both platform usage and administration and is ideally suited for Customer Service Representatives and System Administrators.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - OTA platform
 - GSM standards
 - Wireless services
- ✦ This course is held in English

Duration: 3 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
Introduction/Overview + Wireless service offer + Device Management Overview & use cases	✓
Menus of GCDM + Device Set, Setting Set, Notification, Subscriber	✓
Over The Air Configuration (Transaction) Management + One-shot /Automatic device detection /Monitoring	✓
Campaign Management + Scenarios, Targets + Creation and Scheduling + Monitoring	✓

Day 2	Practice
Device Manager Provisioning + Repository Management:	✓
Account /Device /Device Set /Notification /Setting Set /Subscriber + Repository Management: GUI and file batchloading (XML files)	✓
Device Manager Solution Components + Architecture Overview + Framework + GCDM components + Campaign Manager	✓
Over The Air Configuration (Transaction) Flow	✓

Day 3	Practice
File Locations Commands & Key Scripts	✓
Platform supervision	✓
System Monitoring (Trails, SNMP & Logs)	✓
Platform User Profiles & Accounts	✓

Related Courses:

Device Management Platform Administration	OTA Platform Usage	OTA Platform Administration
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Phone Book Management Platform Administration

Objectives:

At the end of this course you will:

- ✦ **Administrate & maintain a fully functional platform**
- ✦ **Manage the phonebook users on the platform**
- ✦ **Configure and manage the management applet on the users SIM card**

Key Topics:

- ✦ Architecture
- ✦ Platform configuration
- ✦ Applet configuration
- ✦ OTA interaction

Who should attend:

- ✦ System Administrators
- ✦ SIM Managers
- ✦ Telecom Operators
- ✦ Customer Service Managers



Phonebooks are the most popular “data” application used by subscribers: when a subscriber changes their subscription or losses their Mobile phone, this is the point where the highest risk of churn can be expected. The Phone Book Management platform, through your OTA platform, is your new solution to prevent the loss of subscriber churn and potential business. This course delivers the administration principles and gives hands on practical advice.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - OTA
 - GSM SIM Card Structure
 - ETSI & GSM Standards
 - 03.40 & 03.48 Header Structures
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on

www.gemalto.com/training

or contact us:

<http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
What is GemConnect SIMchronize Self care <ul style="list-style-type: none"> + Contacts management + Synchronization + Restoring deleted contacts + Synchronisation set up Customer Care <ul style="list-style-type: none"> + Managing Phone Book + Set up 	Contacts management Contact synchronization Contact restore Agenda management

Day 2	Practice
Overall Architecture Managing user profiles and accounts <ul style="list-style-type: none"> + Creating an administrator profile + Creating a customer care agent profile User account management SIMchronize Applet set-up Files, locations and commands Platform information <ul style="list-style-type: none"> + SNMP configuration + Billing, logging and audit trail configuration + Log files Platform management	User profile creation User profile creation Applet set-up

Related Courses:

Phone Book Management Platform Administration	SIM,STK and OTA Basics	OTA Platform Administration	OTA Platform Development
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Dynamic STK

Service Management Administration

Objectives:

At the end of this course you will:

- ✦ **Manage the SIM-based services of your subscribers over time**
- ✦ **Provision the platform with services, portal (e.g. prepaid, corporate etc...)**
- ✦ **Run and monitor campaigns**
- ✦ **Administrate & maintain a fully functional service management platform**
- ✦ **Manage the different platform user types**

Key Topics:

- ✦ Service Structure definition
- ✦ OTA Service Management
- ✦ Platform Supervision & Maintenance

Who should attend:

- ✦ Telecom Operators
- ✦ Customer Service Representatives
- ✦ System Administrators



Increasing the revenue generated by SIM based service usage is a major concern. In that regard, Service Manager is a state-of-the-art platform using Over The Air technology, which enables telecom operators to accurately manage SIM-based services throughout the life of their SIM cards, while providing operators with detailed information on user profiles, user service contents and usage tracking. With this in mind, this course ideally covers both platform usage and administration tasks.

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a working knowledge of the following technologies:
 - OTA platform
 - GSM standards
 - Wireless services
 - Service development with STKML
- ✦ This course is held in English

Duration: 3 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
Introduction/Overview + SIM-based services (SMS, transactional etc...) + Gemalto solution + Multi-user profile management + Fundamentals of service design for OTA administration	✓
Menus of SM + Service Package, Portal, Service structure, Service profile, Batchload, Service content	✓
Service Management + SIM card for customer care + Service content management commands & check + OTA One-shot request + Tree view /Switch portal /Sending binary files	✓
Monitoring	
Campaign Management	✓

Day 2	Practice
Service Manager Provisioning + Overview + Repository Management:	✓
Service Manager Solution Components + Architecture Overview + Framework + GCSM components + Campaign Manager	✓
Over The Air Service Management Flow + One-shot & transaction + Service Manager monitoring	✓
23.048 message header default parameters	✓

Day 3	Practice
File Locations Commands & Key Scripts	✓
Platform supervision	✓
System Monitoring (Trails, SNMP & Logs)	✓
Important Files (Maintenance) & example of errors	✓
Platform User Profiles & Accounts	✓

Related Courses:

DSTK Service Management Platform	OTA Platform usage	OTA Platform Administration	Dynamic STK Services Development
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Development & support



Java SIM Applet Development

Objectives:

At the end of this course you will:

- ✦ Be able to design and write your own 'interoperable' STK applet.
- ✦ Be able to test, debug and improve your STK applet
- ✦ Have an overview on how to optimize your source code to gain in time and speed

Key Topics:

- ✦ CLASS CONVERSION
- ✦ JAR AND CAP FILES
- ✦ 43.019 API
- ✦ HANDLERS

Who should attend:

- ✦ Development staff

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises



Creating new services has until now required long development cycles and proprietary implementation. Using Java Card based SIM cards and Gemalto SIM Administration & Simulation Tools, based on the latest GSM standards, you can now work in-house, and transform ideas into applications in a matter of days.

This training course will allow you to rapidly get to know the main features of these products and begin developing and testing your own applications

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - ✦ - a basic knowledge of the GSM standards 11.11, 11.14 (SIM Toolkit), 03.48.
 - ✦ - a basic knowledge of object-oriented programming.
 - ✦ - It is strongly recommended that you follow the "Java SIM Card Administration" course before attending this course
- ✦ This course is held in English

Duration: 2 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1	Practice
Trainees registration and training overview Reminder on Java card architecture (JCRE, VM..), Description of Java card API Description of 43.019 API Practical Exercises	Add a new STK menu to an applet implementing a proactive command, compile/convert/load/install/test

Day 2	Practice
Overview on Optimisation of code in size and speed Practical Exercises	Add a new service in an applet using the event SMS_PP and other proactive commands. Optimise your applet code. Configure an OTA communication chain to test and debug your applet.

Related Courses:

SIM, STK & OTA Basics (T1001I)	Java SIM Card Administration (T1006A)	Java SIM Applet Development (T1007D)
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Dynamic STK Service Development

Objectives:

At the end of this course you will:

- ★ Understand what is Dynamic SIM Toolkit technology
- ★ Understand the different methods and practices in building a service
- ★ Build a set of services
- ★ Test those services from end to end and see the results
- ★ Understand the different methods in service management (third day)

Key Topics:

- ★ Language & File Structures:
- ★ S@TML, WML, STKML
- ★ Creating services
- ★ Local pages
- ★ Pages with choice
- ★ Distant pages
- ★ Dynamic services
- ★ Service administration
- ★ Managing services

Who should attend:

- ★ Telecom Operators
- ★ Wireless Application Developers



One of the best ways to retain customers is in differentiating the service offering from that of the competition. Whilst providing mobile data services to their customers, operators are also willing to enhance their 3G offers. The implementation of m-services based on Java dynamic SIM Toolkit is the first and fastest step in that moving from a simple transport network business, to a transport and value added services business

Each training session consists of:

- ★ A complete course manual
- ★ Practical exercises

Pre-requisites:

- ★ This course requires participants to have a basic knowledge of the following technologies:
 - SIM card structure
 - ETSI and GSM standards
 - Practical knowledge of any computer language
- ★ This course is held in English

Duration: 3 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

Service Designer Studio V4.0

Objectives:

At the end of this course you will:

- ★ Understand what is Dynamic SIM Toolkit technology
- ★ Understand the different methods and practices in building a service
- ★ Build a set of services
- ★ Test those services from end to end and see the results
- ★ Understand the different methods in service management (third day)

Key Topics:

- ★ Language & File Structures:
- ★ Creating services
- ★ Local pages
- ★ Pages with choice
- ★ Distant pages
- ★ Dynamic services
- ★ Service administration
- ★ Managing services

Who should attend:

- ★ Telecom Operators
- ★ Wireless Application Developers



One of the best ways to retain customers is in differentiating the service offering from that of the competition. Whilst providing mobile data services to their customers, operators are also willing to enhance their 3G offers. The implementation of m-services based on Java dynamic SIM Toolkit is the first and fastest step in that moving from a simple transport network business, to a transport and value added services business

Each training session consists of:

- ★ A complete course manual
- ★ Practical exercises

Pre-requisites:

- ★ This course requires participants to have a basic knowledge of the following technologies:
 - SIM card structure
 - ETSI and GSM standards
 - Practical knowledge of any computer language
- ★ This course is held in English

Duration: 1 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.

OTA Platform Development

Objectives:

At the end of this course you will:

- ✦ Understand interaction with OTA Platform.
- ✦ Be able to develop clients with the Platform's API
- ✦ Be able to create and integrate new value added services to the platform
- ✦ Be able to customise the Platform's web interface



Developing external applications to interact with your Over The Air (OTA) platform, is an additional way to deliver Value Added Services (VAS) to your many existing subscribers and also gaining new ones. Being able to communicate with the OTA platform and treat the many different services and add new applications makes sure that your OTA Platform is always at the cutting edge in service delivery

Key Topics:

- ✦ Architecture
- ✦ File Structures
- ✦ Security & Management
- ✦ Graphical User Interface
- ✦ OTA Services

Who should attend:

- ✦ System Developers
- ✦ Service Developers
- ✦ System Administrators
- ✦ SIM Managers

Each training session consists of:

- ✦ A complete course manual
- ✦ Practical exercises

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - Unix
 - Oracle
 - GSM SIM Card Structure
 - ETSI & GSM Standards
 - Java
 - HTML & JSP
- ✦ This course is held in English

Duration: 3 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers
For on-site training, please contact us.



Course Schedule:

Day 1	Practice
Architecture & APIs + Platform module explanation Core API presentation + Presentation + Modules Core API development + Create a Java Client to operate with the Core API	Customs practicals
Day 2	Practice
SMS Library V4 + Description of the Library 03.48 Concatenation + How to concatenate ESMS GUI Modification + How to Modify the Web pages in your language	Customs practicals
Day 3	Practice
Open Workshop Develop your ideas + This part of the course is driven by the customer and their requirements	Customs practicals

Related Courses:

SIM & OTA Basics Course	OTA Platform Usage Course (T1003I)	OTA Platform Administration (T1004A)	OTA Platform Development Course (T1009D)	OTA Platform Advanced (T1017A)
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Security Courses



Security & Cryptography

Objectives:

At the end of this course you will:

- ✦ **Understand smart card security, smart card oriented cryptography and related issues**

Key Topics:

- ✦ Basics of security and cryptography
- ✦ Key management
- ✦ Open OS card security
- ✦ Side channel attacks
- ✦ SPA attacks
- ✦ DPA attacks
- ✦ DFA attacks
- ✦ Fraud control

Who should attend:

- ✦ R&D personnel
- ✦ - to implement cryptographic procedures
- ✦ - to take smart card cryptographic aspects into account



Cryptography is the science of secure communication. In addition to providing confidentiality, cryptography provides authentication, integrity & non repudiation. Gemalto has a long history and recognised expertise in cryptography-based solutions around smart cards. This training seminar will allow you to benefit from this experience

Each training session consists of:

- ✦ A complete course manual

Pre-requisites:

- This course requires participants to have a basic knowledge in hardware and software development, mathematics and computer science
- ✦ This course is held in English

Duration: 3 Days

Course fee:

Please refer to regional schedules on www.gemalto.com/training or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Gemalto Training Centers. For on-site training, please contact us.



Course Schedule:

Day 1

Welcome and training overview

FOUNDATIONS

- + Information Security
- + Cryptography Basics
- + Common cryptographic protocols
- + Key Management
- + ISO-15408 standard: Common Criteria
- + Open Card OS Security

Day 2

SMART-CARDS AND SECURITY

- + Introduction to Smart Card
- + Side Chanel Attack
- + SPA Attacks and counter measures
- + DPA Attacks and counter measures
- + DFA Attacks and counter measures
- + Demos if possible

Day 3

OTHER SECURITY ASPECTS

- + Smart Card Fraud Control & Real Life Scenario
- + GSM security overview
- + Secure programming techniques overview
- + Secure System Administration
- + Smart Card Security : managing the risks
- + Overall conclusion

Presentations done during the third day can be adapted to the client's need and background.

Related Courses:

**Security &
 Cryptography
 (S10012)**

**PKI Fundamental
 of Secure
 Networking
 (S1001S)**

Web-Based Training Courses



E-LEARNING: SIM, STK & OTA Basics

Objectives:

At the end of this course you will:

- ✦ **Have an overview of the main GSM SIM card standards**
- ✦ **Understand SIM card functionality and potential value added services**
- ✦ **Be able to understand the “Over-The-Air” (OTA) remote SIM card management process**

Key Topics:

- ✦ SIM
- ✦ 3GPP 51.011 (GSM 11.11)
- ✦ 3GPP 51.014 (GSM 11.14)
- ✦ 3GPP 23.048 (GSM 03.48)
- ✦ SIM Application Toolkit
- ✦ SMS & “OTA”
- ✦ Authentication

Who should attend:

- ✦ SIM Managers
- ✦ Project Managers
- ✦ Developers
- ✦ IT department staff
- ✦ ...



SIM cards not only allow secure network access of subscribers to network operator's networks, but also standard Value Added Service deployment, on a future proof platform. This e-learning module allows you to study when & where you want, at your own pace... ...and easily understand the role of SIM cards in GSM network, value added services implementation with “SIM Toolkit” & remote management of SIM content “Over-The-Air”

Each training session consists of:

- ✦ An e-Voucher giving access to web based training module for 1 year comprising...
- ✦ ...User-friendly presentations, demos & quizzes

Pre-requisites:

- ✦ An understanding of the GSM network, as well as an electronic or computer background would be useful
- ✦ This course is held in English

Duration: Self-paced
(3 hours of presentation & demos)

Course fee:

Please refer to our webstore www.gemalto.com/training/e-learning.html or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Anywhere you have broadband internet access



Course Schedule:

Presentations	Demos
<p>ACTIVITY 1: SIM Card Basics</p> <ul style="list-style-type: none"> ✦ Role of SIM card & Standards ✦ SIM architecture & Manufacturing process ✦ SIM Files and Access Conditions ✦ PIN codes ✦ Network Authentication with secret key ✦ Special Features & SIM command summary ✦ Demo <p>ACTIVITY 2: SIM Toolkit & Value Added Services</p> <ul style="list-style-type: none"> ✦ Introduction to SIM Application Toolkit ✦ SIM Toolkit “STK” concepts ✦ SIM Application Toolkit standards ✦ Proactive Commands ✦ Event Commands ✦ STK Protocol ✦ Demo <p>ACTIVITY 3: Remote management of SIM “Over-the-Air”</p> <ul style="list-style-type: none"> ✦ How & Why SIM accessed remotely ✦ SMS Network access to SIM ✦ Security for OTA SIM access ✦ SIM execution of OTA commands ✦ Notification & Network Response (Proof of Receipt...) 	<p>Managing SIM card content Network authentication simulation</p> <p>Running a SIM Toolkit Value added service application</p> <p>OTA simulation tools with/without encryption</p>

Related Courses:

ELEARNING: SIM, STK & OTA Basics (e1001I)	ELEARNING : USIM in 3G Networks (e1002I)	USIM in 3G networks Course (T1002I)	JAVA SIM Card Admin Course (T1006A)
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E-LEARNING:

USIM in 3G Networks

Objectives:

At the end of this course you will:

- ✦ Be able to state the main evolutions of Telecom Card ETSI-3GPP “Rel-6” standards
- ✦ Understand the basic technologies, features and standards around 3G cards.
- ✦ Understand the functionality of the USIM and difference with 2G cards.
- ✦ Have an overview on the architecture & contents of the card, security of data in file systems, 3G authentication advanced phonebooks

Key Topics:

- ✦ USIM
- ✦ UICC
- ✦ USAT
- ✦ CAT
- ✦ OTA
- ✦ Milenage Algorithm
- ✦ GSM/3G Interworking
- ✦ 3GPP & ETSI-SCP Standards

Who should attend:

- ✦ SIM Managers
- ✦ Project Managers
- ✦ Developers
- ✦ IT department staff



Since 3G is expected to become the dominant mode of communication system within the next couple of years, the USIM (Universal Subscriber Identity Module) implemented on the Gemalto 3G cards can be your passport to 3G networks.

This e-learning module allows you to study when & where you want, at your own pace...

...and gives you a comprehensive overview on the USIM card features & functionalities to secure 3G networks.

Each training session consists of:

- ✦ An e-Voucher giving access to web based training module for 1 year comprising...
- ✦ ...User-friendly presentations, demos & quizzes

Pre-requisites:

- ✦ This course requires participants to have a basic knowledge of the following technologies:
 - GSM SIM cards
 - GSM 11.11 & 11.14 standards
- ✦ This course is held in English

Duration: Self-paced
(Several hours of presentation & demos)

Course fee:

Please refer to our webstore www.gemalto.com/training/e-learning.html or contact us:
<http://www.gemalto.com/training/contact.html>

Location:

Anywhere you have broadband internet access.



Course Schedule:

Presentations
<p>ACTIVITY 1: Introduction to 3G</p> <ul style="list-style-type: none"> + Introduction to 3G Technology & cards + Standards
<p>ACTIVITY 2: UICC: 3G Card Platform</p> <ul style="list-style-type: none"> + Physical characteristics & File system + Logical channels + Commands
<p>ACTIVITY 3: UICC: Access Conditions</p> <ul style="list-style-type: none"> + Access Conditions Introduction + Access mode and security conditions + UICC PIN system
<p>ACTIVITY 4: USIM: 3G Authentication</p> <ul style="list-style-type: none"> + Authentication and Key Agreement + Authentication token & Synchronization + Milenage Algorithm
<p>ACTIVITY 5: USIM: Phonebook</p> <ul style="list-style-type: none"> + Phonebook principle + Designing a Phonebook

Related Courses:

**ELEARNING:
 USIM in 3G
 Networks
 (e1002I)**

**Java 3G Card
 Administration
 (T1007A)**

**ELEARNING:
 USIM Standards
 Evolutions
 (e1015S)**

E-LEARNING:

USIM Standards Evolutions

Objectives:

At the end of this course you will:

- ✦ **Be able to state the main evolutions of Telecom Card ETSI-3GPP “Rel-6” standards**
- ✦ **Have an overview of the new smart card’s: Java Card 2.2.1 & Global Platform 2.1.1 functionalities**
- ✦ **Have examples of future services based on new standards and cards**

Key Topics:

- ✦ ETSI-3GPP Standards
- ✦ Global Platform 2.1
- ✦ Java Card 2.2 (RMI, Garbage Collector)
- ✦ UICC/SIM/USIM
- ✦ Toolkit
- ✦ Logical Channels
- ✦ “OTA”
- ✦ CAT-TP
- ✦ Advanced Services (Device Management, DRM, J2ME, Phonebook)

Who should attend:

- ✦ SIM Managers
- ✦ Project Managers
- ✦ Developers
- ✦ IT department staff
- ✦ ...



New SIM card standards & specifications naming and evolutions are often confusing and finding information or anticipating new service opportunities becomes more & more difficult.

This e-learning module allows you to study when & where you want, at your own pace...
...and gives you a comprehensive overview on the new standards evolutions, associated product features, and future service opportunities.

Each training session consists of:

- ✦ An e-Voucher giving access to web based training module for 1 year comprising...
- ✦ ...User-friendly presentations, demos & quizzes

Pre-requisites:

- ✦ An understanding of GSM Network
- ✦ A working knowledge of:
 - “Release 5” ETSI/3GPP /GP/Java Card Standards & USIM Characteristics
- ✦ This course is held in English

Duration: Self-paced (3 hours of presentation & demos)

Course fee:

Please refer to our webstore www.gemalto.com/training/e-learning.html or contact us: <http://www.gemalto.com/training/contact.html>

Location:

Anywhere you have broadband internet access



Course Schedule:

Presentations
<p>ACTIVITY 1: Introduction to USIM Standards Evolutions</p> <ul style="list-style-type: none"> + Changes in USIM Standards
<p>ACTIVITY 2: Java Card 2.2.1</p> <ul style="list-style-type: none"> + New Features & Logical Channels + Remote Method Invocation & SATSA
<p>ACTIVITY 3: Global Platform 2.1.1</p> <ul style="list-style-type: none"> + Reminder: Security Domains + New Global Platform (GP) Features + Security Domains with Privileges
<p>ACTIVITY 4: ETSI - 3GPP Release 6</p> <ul style="list-style-type: none"> + File Systems & Mechanisms [ETSI102 221-3GPP 31.101/2] + File Administration [ETSI 102 222] + Toolkit Evolutions [ETSI 102 223 - 3GPP 31.111] + BIP & CAT-TP [ETSI 102 227] + Toolkit APIs [ETSI 102 241 & 3GPP 31.130] + OTA Secure Remote Management [ETSI 102 225/6-3GPP 31.115/6] + ISIM (IMS Subscriber Identity Module)

Related Courses:

<p>ELEARNING: USIM in 3G Networks (e1002I)</p>	<p>Java 3G Card Administration (T1007A)</p>	<p>ELEARNING: USIM Standards Evolutions (e1015S)</p>
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Course registration form

Booking Form	
Please complete your details below and then either fax, e-mail back or return the form by post to your training center. You may also reserve your course online on gemalto.com/training .	
Course name:	Course Code:
City:	Date:
Fee €:	
Total €:	Plus VAT 19,6%:
Ms <input type="checkbox"/>	Mrs <input type="checkbox"/> Mr <input type="checkbox"/>
First Name:	Family Name:
Company:	
Address:	City
	ZIP
	Country
Phone	Fax
e-mail	
If you wish to include more delegates, please photocopy this form.	

Travel and accommodation assistance	
<p>In partnership with Gemalto, BBA can handle the reservation of your accommodation, free of charge. We select and propose the hotel, which corresponds as closely as possible to your criteria, and that is easily accessible from the Gemalto training centers.</p> <p>Simply fill in your details below and send this form by email or Fax to BBA :</p> <p>FAX : +33 1 49 21 55 99 EMAIL : solution@netbba.com</p>	
Arrival date	Arrival time
Flight number:	Airport:
Departure date	Departure time
Accommodation: YES <input type="checkbox"/> NO <input type="checkbox"/>	Hotel categories: 2** <input type="checkbox"/> 3*** <input type="checkbox"/> 4**** <input type="checkbox"/>
	Or Budget per night :
Single room <input type="checkbox"/> double room <input type="checkbox"/> Twin room <input type="checkbox"/>	Smoker : YES <input type="checkbox"/> NO <input type="checkbox"/>
Car rental: YES <input type="checkbox"/> NO <input type="checkbox"/>	ategory : A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/>
Taxi: YES <input type="checkbox"/> NO <input type="checkbox"/>	
Guarantee: (use only as a guarantee not for payment)	
International Credit Card : American Express <input type="checkbox"/> Visa <input type="checkbox"/> EurocardMastercard <input type="checkbox"/>	
Number: Validity date: Card holder:	
Booking confirmation required:	By mail <input type="checkbox"/> By fax <input type="checkbox"/>



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