Telecoms & Tech Academy

COURSE DESCRIPTION
MOBILE SECURITY

Format:
Classroom

Duration:
2 Days

COURSE SUMMARY

HIGHLIGHTS

- **Highly focused and in-depth training from the experts - including relevant updates from Informa's extensive research team**

- **Trainers and programme directors that are experts, industry experienced, and highly accomplished training professionals**

- **Training outcomes and competency development designed to meet your specific requirements**

"

"The course was very insightful and the lessons learnt from the course will be very relevant to the telecoms industry

BL ETISALAT

COURSE SUMMARY

Security is, and has always been, central to mobile communications but an understanding of that security is far from universal even within the industry. This course covers the development of mobile security, from the early analogue systems to GSM's security-through-obscurity and on to today's public algorithms and published techniques, so delegates can understand the resilience, and limitations, of the mobile infrastructure as it stands, and as it is being developed.

In addition to looking at the ciphers and key-exchange systems used to protect the mobile infrastructure the course covers the motivation behind those developments, and the political forces which still influence the deployment of security around the world.

Delegates completing the course will gain a comprehensive understanding of just how secure mobile services are, how to ensure their own applications take full advantage of the implemented security, and when it might be necessary to extend that model.

OUTCOMES & COMPETENCY DEVELOPMENT

Participants will develop or be able to:
- A solid understanding of the security mechanisms available across the generations of mobile network
- Make well-grounded and realistic judgements on the security of any given mobile network
- Establish the framework and develop implemented security of any specific network
- Evaluate the suitability of network infrastructure for secure application use
- Apply effective techniques to enhance device, and network, security
- Make well-judged decisions on security modeling

Book online
telecomstechacademy.com

Book over the phone
+44 (0)20 7017 4144

Book via email
training@telecomstechacademy.com

COURSE CONTENTS

THE DEVELOPMENT OF MOBILE SECURITY

- A Historical Context
- Attack vectors and threats
- Early phone systems
- Operator priorities
- Security Concepts
- Ciphers and codes
- Key-exchange mechanisms
- Cryptographic algorithms
- Authentication systems
- The Subscriber Identity Module
- The evolving SIM
- Physical protection techniques
- The SIM application toolkit
- The GSM Security Model
- The GSM authentication process
- Authentication while roaming
- Additional authentication techniques
- GPRS extensions to the GSM model
- 3G Security
- UMTS Authentication & Key Agreement
- Enhanced algorithms and ciphers
- 4G (LTE) Security
- Extended AKA application

NETWORK-INDEPENDENT AUTHENTICATION

- EAP-SIM
- EAP-AKA
- IP Security Techniques in Mobile
- TLS/SSL
- WTLS
- Transport level authentication

MOBILE APPLICATION SECURITY

- Cloud authentication services
- Identity aggregation services
- Smartphone platform security
- Malware and spyware

POLITICAL RAMIFICATIONS

- Lawful intercept requirements
- ITAR
- Public perception of security issues
- The role of the platform distributer

THE MOBILE SECURITY BUSINESS MODEL

- Primary vectors of attack
- Primary targets of attack
- Primary victims of attack
- Primary beneficiaries of attack

OUR TRAINING SERVICES

TELECOMS & TECH ACADEMY STRUCTURE

Our training programmes are delivered worldwide as part of the training and development plans of many operators, vendors, and service providers. The programmes cover a wide range of competency development requirements.

To ensure we meet the training needs of the industry as effectively as possible, we operate three schools:

School of Telecoms Management
Business training tailored to the telecoms industry, ranging from the intensive 5-day Telecoms Mini MBA to specialist leadership and marketing training.

School of Advanced Communication Technologies
Covering a multitude of technologies, these courses range from overviews aimed at nontechnical staff to in-depth engineering training.

Distance Leaning
Our comprehensive suite of Distance Learning programmes provide an excellent opportunity to expand knowledge and build confidence.

OUR TRAINERS

We only use trainers and programme directors that satisfy the following three criteria:

- Experts in their field
- High level of Industry Experience
- Expert facilitators and training professionals.

All our trainers have undergone a rigorous election process and are subject to continuous monitoring and evaluation. Each trainer is accredited for specific courses or topic areas. Whether engineers or business experts, all our trainers are required to continue their own development within their specialist areas, and to broaden their Industry view of trends, best practice and technology.

This is achieved by our on-going work with many tier 1 operators and vendors, and by full exposure to Ovum research and KNect 365 TMT worldwide events.

UNIVERSITY ACCREDITATION

Some of our programmes have been accredited by the University of Derby Corporate; a UK-based university highly acclaimed in the area of employer engagement. They are at the forefront of the drive to integrate highly focused industry -led training with the academic rigor and quality control of university-based education. Our comprehensive Advanced Telecoms Management Series have been accredited Post-Graduate Level, with our extensive suite of Distance Learning at Undergraduate Level)

We would be happy to discuss extending accreditation to tailored ATMS or programmes based on our Distance Learning modules. Although accreditation is specific to these programmes, the work we do with the University of Derby enable us to develop and apply best practice across our portfolio.

CUSTOMISED IN-HOUSE TRAINING

Telecoms & Tech Academy has worked with countless companies to deliver customised training programmes. We take time to understand your requirements, you'll work with our specialist training team to ensure that we deliver your perfect training programme for your business.

A customised training programme from Telecoms & Tech Academy ensures you get a course that precisely matches your organisation's needs, presented by a first-rate training organisation, with access to all the latest industry research and analysis.

WHY CHOOSE IN-HOUSE TRAINING FROM TELECOMS & TECH ACADEMY?

- Content can be customised to focus on the issues you want – work with us to develop the training course to match the exact needs.
- Unique industry research – from Ovum's team of industry leading analysts
- Expert trainers – our team of versatile trainers have the knowledge and experience to deliver a highly effective learning experience
- The most efficient way to train your staff – at the time and location to minimise disruption
- Flexible delivery options – with a range of instructor led, distance learning and virtual classroom formats available you can build a blended solution to maximise training effectiveness over the long term
- Pre and post course assessment – can be included in programmes to measure competencies and check on the required progress.

Contact us to discuss how we can build your perfect programme.

www.telecomstechacademy.com

KNect365
Learning
an **informa** business