

# SIMs, USIMs, ISIMs and eSIMs

## **Course Description**

SIM cards (Subscriber Identity Module) are a key part of 2G, 3G, 4G and 5G systems. This short course provides an insight into the physical aspects of SIM cards, as well as their associated file structure. In so doing, the course focuses on USIM files and how new 4G and 5G parameters can be added. Following this, the features of USAT (USIM Application Toolkit) and CAT (Card Application Toolkit) are examined. Finally, the course focuses on eSIMs (Embedded SIMs) and the GSMA M2M (Machine to Machine) and Consumer models for Remote SIM Provisioning.

This course has no prerequisites.



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#### This course will contain the following sections:

## 1. SIMs, USIMs, ISIMs and eSIMs

#### **Topic areas covered include:**

- Evolution of SIM Cards:
  - SIMs in Mobile Networks.
  - UICC Standards and Card Evolution.
  - Dual SIM Cards.
- UICC / USIM Structure:
  - UICC Logical Structure.
  - UICC Physical Contacts.
  - Communication with the UICC Card.
- SIM / USIM File Structure and Application:
  - UICC File Types and Application Structure.
  - Elementary File Types.
- (U)SIM and ISIM:
  - 3GPP Dedicated File Applications.
  - USIM Application.
  - ISIM Application.
- USIM Security:
  - SIM PIN.
  - SIM Lock.
  - 3GPP Security.
  - Security Aspects of File Types.
- USIM Application Toolkits:
  - Application Toolkits.
  - USAT Features.
- · eSIM:
  - What is an eSIM?
  - eSIM Solutions.
  - eSIM Remote Provisioning.

- GSMA eSIM Provisioning:
  - eSIM M2M Solution Architecture.
  - Connectivity and Security.
  - M2M Model Procedures.
  - eSIM Consumer Solution Architecture.
  - Consumer Model Procedures.
  - Event Registration and Profile Download.



days
(LiveOnsite,
LiveOnline)

hours
learning
(OnlineAnytime)

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