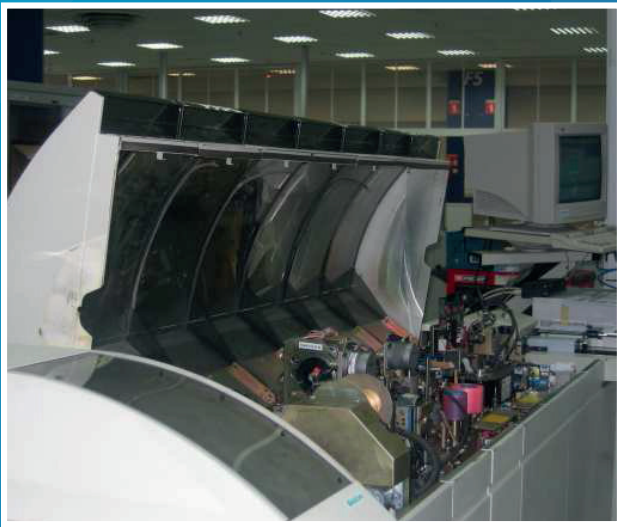THALES
Building a future we can all trust

EMV Training - EMV migration for Personalization Bureau

Banking & Payment Services

INTERMEDIATE COURSES
Course Reference: B1005S

This 4-day seminar allows for the technical management and staff of a personalization bureau to understand in details the EMV card issuance and related security mechanisms. It will give them the right knowledge to upgrade the personalization facility to chip card and obtain the payment system certifications required.

Other technical seminars on Service Bureau operations (data preparation, personalization equipment) may be organized on request.

Objectives

At the end of the training, you will:

- Have a basic understanding about EMV, its scope and impacts on card issuance
- Understand the EMV card personalization
- Be able to prepare the migration of your personalization facility for chip cards

Key topics

- Introduction to EMV
- EMV Card Content
- EMV Migration Impacts on the Issuance process
- CPS (Card Personalization Specification)
- Key management – security requirements
- PIN management

Who should attend

People from technical management and staff working in the domain of card personalization, and involved in the EMV migration process, such as:

- IT Department
- Production Department
- Security Department

Each session consists of

- Complete training manual

Pre-requisites

- Basic knowledge about (magstripe) card personalization process
- This course is held in English. On customer request a session in French can be organized.

Duration:

- 4 days

Location:

- On-site at customer premises, or at one of the Thales training centers. Please contact us for more details.

Course fee:

- € 2799 per attendee, Price does not include taxes nor travel expenses

Course schedule

When performed at customer premises, the agenda is tailored to customer attendance profile.
The standard agenda is provided below:

Day 1

Introduction to EMV

- Major differences between a magnetic stripe transaction and a chip transaction
- Analysis of the differences between the EMV specifications and the EMV implementations defined respectively by Visa and MasterCard
- Review of the major business benefits of the EMV chip card
- Visa and MasterCard liability shifts

EMV Security Benefits

Analysis of the security mechanisms defined in EMV to reduce fraud and limit the financial risk taken by an Issuer:

- Solutions provided by an EMV chip card to improve the security of offline transactions – advantages of offline transactions vs. online transactions
- Solutions provided by an EMV chip card to improve the security of online transactions
- Selection criteria between the Offline authentication methods defined in EMV (SDA/DDA/CDA)

General overview of the EMV transaction

- Application selection and initialisation
- Terminal checks
- Decision cycle: Terminal Action Analysis - Card Action Analysis – Online authorization

Day 2

Analysis of the EMV card content

Detailed review of the data elements present in an EMV card:

- application selection data,
- cardholder data,
- system data,
- risk management data (Visa/MasterCard),
- cryptographic data

EMV Impacts on Card Issuance Process

- General overview of the new information required for card issuance
- New functions required in Card Data Preparation System
- New functions required in Card Personalization System
- Possible scenarios for Issuer Card Issuance Policy
- Definition of the interface between an Issuer and a Service Bureau (chip personalization)

Day 3

Cardholder Verification

I Review of the possible methods available to an Issuer

I Analysis of the algorithm used by the terminal (CVM algorithm)

I Recommendations defined by Visa and MasterCard

I PIN management

Card Authentication Methods

I Methods available at terminal level based on Public Key Infrastructure proposed by payment System (SDA /DDA / CDA)

Key Management Systems involved in a financial process

I List of the Key Management Systems required (Card Issuance System & Transaction Processing)

I List of the keys that need to be shared between the different Key Management Systems

I Methods commonly used to exchange the keys between the different Key Management Systems

Day 4

Security Requirements mandated by Payment Systems for a Personalization Bureau

I Physical certification

I Logical certification

EMV Card Personalization Specification (CPS)

I CPS Scope and objectives

I Data Preparation Interface – DGIs

I Personalization Device Interface – commands

I Implementation

I Impacts of CPS on Issuer, Service Bureau and Card Manufacturer

Related courses

EMV Business Impacts (B1001l)	Mastering EMV Implementation (B1002l)
EMV Migration for Personalization Bureau (B1005S)	EMV Card Personalization Specification (B1007S)

For further information about registration, course schedule: please contact us via email to: bps_training@thalesgroup.com or visit our web site: https://www.thalesgroup.com/en/markets/digital-identity-and-security/banking-payment/consulting

> Thalesgroup.com <