

# Biometrics for Payments



Biometric technology has been used for years for identification, in sectors such as government and law enforcement agencies. It is considered as a highly efficient and reliable method of identity recognition and authentication

With the evolution of payment industry, the adoption of biometrics is also growing; especially with the development of biometrics within smart cards and mobile devices that provide to consumers a secure and convenient alternative to traditional PIN verification.

The purpose of this training is to provide technical insights on how biometrics can be integrated to the payment world. It is based on Gemalto know-how and practical experience on card and mobile payment projects.

## Objectives

At the end of the training, you will:

- > Understand the fundamentals of biometrics
- > Focus on fingerprint verification for card and mobile payments
- > Understand the specificities of matching environments
- > Learn about existing implementations
- > Have a comprehensive overview of the main biometric standards
- > Get business insights on market trends and biometric usages

## Key topics

- > Biometrics
- > Fingerprint
- > Cardholder verification
- > Match on card
- > Consumer device CVM
- > Standards

## Who should attend

Original Equipment Manufacturer (OEM), Banks or service providers willing to use biometrics for identification and authentication of their customers

- > Marketing managers
- > Product managers
- > Project managers

## Each session consists of

- > A complete course manual including a dictionary of the most frequent acronyms used in the payment ecosystem involving biometrics

## Pre-requisites

- > Basic knowledge on banking processes and cards/ mobile payments will be a plus.
- > This course is held in English. On customer request sessions in French or Spanish can be organized.

**Duration:** 1 day

**Location:** Gemalto premises<sup>1</sup>

**Course fee:** € 1049 per person<sup>2</sup>

<sup>1</sup>All training courses can be held on-site at customer premises, or at one of the Gemalto training centers. Please contact us for more details.

<sup>2</sup> Price does not include any taxes

## Course schedule

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

### Agenda

#### Introduction to Biometrics

- > Forms of Biometrics
- > Why use Biometrics
- > Biometric techniques
- > Introduction to Identification and Authentication

#### Focus on fingerprint

- > Fundamentals of fingerprint technology
- > Extraction and matching processes
- > Matching environments

#### Fingerprint for Card Payments

- > Enrollment and verification processes
- > Performances and Interoperability overview
- > Overview of EMV flow and focus on Cardholder Verification Methods
- > Adding biometrics as CVM
- > Match-on-card implementations
  - Architecture of a Match-on-Card solution
  - Constraints and limitations
  - Case Studies

#### Fingerprint for mobile payments

- > Overview of consumer device CVMs
- > Adding biometrics as a shared consumer device CVM
- > Consumer Device Cardholder Verification System
  - Architectures and components description
  - Constraints and limitations
  - Case Studies

#### Regulatory bodies & Technical Standards

- > ISO/IEC; JTC1; NIST
- > GP specifications
- > FIDO initiative
- > EMVCo Initiative
- > Data protection implications

#### Market Trends and biometrics for other usages

- > Availability of mobile devices with biometric sensors
- > Customer acceptance figures
- > Biometrics for other services

## Related courses

Introduction to  
Banking World  
(B1014I)

Explore the New  
Dimensions of  
NFC Payment  
(B1015I)

Design your  
NFC Mobile  
Payment Project  
(B1013W)

Define your NFC  
Mobile Payment  
Card Profile  
(B1017W)

Biometrics for  
Payment  
(B1033I)

For further information about registration, course schedule:  
please contact us via email to: [banking.training@gemalto.com](mailto:banking.training@gemalto.com)  
or visit our web site: <http://www.gemalto.com/>