

# MIFARE DESFire Training

This one day training presents the features of MIFARE DESFire EV1 with the hints for optimum usages. It includes practical workshop sessions and application specific hands-on for solution developers.

## Audience

- MIFARE System designers
- MIFARE Solution developers

## Prerequisites

- Knowledge of M1.1 and M1.2
- Watching the MIFARE DESFire Introduction video from [www.mifare.net](http://www.mifare.net)
- Knowledge of basic cryptography e.g. TDES, AES, CMAC, CRC

## Recommendations

At least a quick 'going through' of the product data sheet.

## Course Contents

### Introduction

Welcome and team Introduction  
 Proximity system architecture  
 MIFARE DESFire EV1 introduction and positioning  
 MIFARE DESFire Evolution  
 MIFARE DESFire Implementation and convergence  
 MIFARE DESFire applications

### Software and Hardware Installation

RD710, MIFAREDiscover,

### MIFARE DESFire EV1 Architecture

Memory, PICC Level, Configuration, Keys  
 Application Level, Delegated Application, Application sharing, KeySettings, Multiple Key Sets  
 KeySet Rolling, Multiple Access Rights, Different Files.

### MIFARE DESFire EV1 Commands

Quick going through all the commands and purposes  
 Use of native and ISO/IEC 7816 modes,  
 Workshop: Practicing commands

### MIFARE DESFire EV1 Cryptography and Secure Messaging

Different crypto options, Authentication, Confidentiality Transaction MAC  
 HW and SW security

### Workshop

Personalization and validation of Applications using MIFARE DESFire EV1 (AFC and Access control)  
 Creation of delegated application  
 Application sharing Rolling of key set Transaction MAC handling.

### MIFARE DESFire EV1 – Additional Security and design hints

Design Considerations for optimum security, transaction time and interoperability  
 Product Support Package

### MIFARE DESFire EV2

An overview of new features

**This course includes the MIFARE Workshop Package!**

## Duration:

09:00 – 17:00

## Dates:

<http://www.nxp.com/products/re-lated/customer-training.html>