



Visa and MasterCard Certification Training

28 February – 4 March 2027
Nairobi



Visa and MasterCard Certification Training

Ref: 36230_93230 **Date:** 28 February – 4 March 2027 **Location:** Nairobi **Fees:** 4500 Euro

Visa and MasterCard Certification Training Overview:

This specialized training program is tailored to inform issuer banks about the intricacies of the Mastercard and Visa certification processes. It provides comprehensive guidance on each step of the integration process, equipping issuers with the knowledge and tools necessary to implement new cards seamlessly. Participants will gain a deep understanding of the Mastercard and Visa integration processes, identify potential challenges at each stage of the certification process, and develop strategies to overcome them effectively.

Target Audience:

- Issuer banks
- Card program managers
- Payment system integrators
- Compliance officers
- Financial institution executives

Targeted Organizational Departments:

- Card Operations
- Product Development
- Risk Management
- Compliance
- IT and Technology

Targeted Industries:

- Banking and Financial Services
- Payment Processing
- Fintech
- Retail
- E-commerce

Course Offerings:

By the end of this course, participants will be able to:



- Understand the Mastercard and Visa integration processes in detail.
- Identify and address challenges encountered during the certification process.
- Implement best practices for seamless card integration.
- Develop strategies to optimize card program efficiency and compliance.
- Utilize Mastercard and Visa certification tools effectively.

Training Methodology:

This course employs a blend of interactive lectures, practical demonstrations, and hands-on exercises to facilitate learning. Participants will engage in:

- Step-by-step walkthroughs of the Mastercard and Visa integration processes.
- Case studies highlighting real-world integration challenges and solutions.
- Group discussions to share insights and experiences.
- Q&A sessions with industry experts.
- Feedback sessions to assess understanding and address queries.

Course Toolbox:

Participants will receive access to:

- Training materials and resources
- Mastercard and Visa certification guides
- Case study materials
- Integration process templates



Course Agenda:

Day 1: EMV Overview and Certification Basics

- **Topic 1:** EMV History, Key Players, and Definitions
- **Topic 2:** Overview of EMV Specifications
- **Topic 3:** Multi-Application Standards MULTOs, GP
- **Topic 4:** EMV Card & Terminal Certifications
- **Topic 5:** Acquirer and Issuer Certification Processes
- **Topic 6:** Certification Requirements for Visa & MasterCard
- **Reflection & Review:** Insights on EMV Foundations and Certification Basics

Day 2: Key Management and Security in EMV

- **Topic 1:** EMV Security Algorithms RSA, T-DES, SHA-1, Key Derivation, etc.
- **Topic 2:** Online and Offline Data Authentication Algorithms SDA, DDA & CDA
- **Topic 3:** Offline & Online PIN Encryption Techniques
- **Topic 4:** Terminal Public Key Management
- **Topic 5:** Issuer T-DES Key Management
- **Topic 6:** Hands-on Exercise: Encryption & Key Management Scenarios
- **Reflection & Review:** Key Takeaways on Security and Key Management

Day 3: EMV Transaction Workflow and Integration Steps

- **Topic 1:** Application Selection Process
- **Topic 2:** Initiating Application Processing
- **Topic 3:** Reading Application Data and Analyzing Data Elements
- **Topic 4:** Online Data Authentication and Processing Restrictions
- **Topic 5:** Cardholder Verification and Risk Management
- **Topic 6:** Issuer Scripting
- **Reflection & Review:** Key Learnings from EMV Transaction Workflow



Day 4: Issuing & Acquiring Systems and Additional Implementations

- **Topic 1:** Requirements for EMV Issuing Systems
- **Topic 2:** EMV Acquiring System Requirements
- **Topic 3:** EMV Personalization System Guidelines
- **Topic 4:** Online Messaging Formats and System Integration
- **Topic 5:** Advanced EMV Chip Authentication Programs CAP and DPA Standards
- **Topic 6:** EMV Display Cards and Prepaid Standards
- **Reflection & Review:** Advanced Insights on Issuing, Acquiring, and Implementation

Day 5: Advanced EMV Implementations and Final Assessment

- **Topic 1:** Utilizing Advanced EMV Chip Authentication Programs CAP
- **Topic 2:** Dynamic Passcode Authentication DPA Standards
- **Topic 3:** Understanding EMV Display Cards Features
- **Topic 4:** Exploring EMV Prepaid Standards
- **Topic 5:** Case Studies: Implementing EMV Standards in Real-world Scenarios
- **Topic 6:** Final Assessment: Application of Course Learnings
- **Reflection & Review:** Course Highlights and Final Takeaways

How This Course is Different from Other Courses:

This course stands out due to its:

- Focus on both Mastercard and Visa integration processes
- Comprehensive coverage of key certification stages and challenges
- Hands-on approach with practical exercises and case studies
- Emphasis on industry best practices and optimization strategies
- Access to specialized certification tools and resources