



# Post-Quantum Cryptography Migration Architecture Training Course

6 – 10 September 2027  
Kuala Lumpur

## Post-Quantum Cryptography Migration Architecture Training Course

**Ref:** 402\_132709 **Date:** 6 – 10 September 2027 **Location:** Kuala Lumpur **Fees:** 5200 Euro

### Overview

Post-Quantum Cryptography Migration Architecture Training Course is a five-day advanced course for architecture, security, PKI, risk, application, infrastructure, and transformation professionals who leave with a Quantum-Safe Transition Architecture Pack. The course connects threat exposure, cryptographic discovery, crypto-agility, target architecture, standards, suppliers, testing, governance, and phased delivery. Participants turn scattered cryptographic dependencies into a controlled migration design. Agile Leaders Training Center delivers this course on post-quantum cryptography migration architecture.

### Who Should Attend

- Enterprise architecture functions responsible for target states and technology roadmaps
- Security architecture functions responsible for cryptographic patterns and risk controls
- PKI and identity functions responsible for keys, certificates, and trust services
- Application and infrastructure functions responsible for protocols, platforms, and dependencies
- Technology-risk and data-governance functions responsible for exposure and risk acceptance
- Procurement and transformation functions responsible for supplier readiness and delivery governance

The course assumes participants already work with enterprise security architecture and cryptographic services, and it leaves out quantum-computing theory, introductory cybersecurity, and algorithm coding.

### Departments and Industries

The course supports post-quantum cryptography migration across regulated, digital, and infrastructure-dependent organizations.

- Cybersecurity, enterprise architecture, identity, and infrastructure departments
- Banking, insurance, payments, and financial-technology organizations
- Telecommunications, cloud, software, and managed-service providers
- Healthcare, energy, transport, and industrial organizations
- Procurement, technology risk, data governance, and transformation offices

### Learning Objectives

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



- Analyze quantum exposure across data, systems, and cryptographic dependencies
- Build a governed cryptographic inventory and prioritization model
- Apply crypto-agility principles to target-state architecture
- Evaluate PQC standards, PKI, protocol, supplier, and interoperability impacts
- Compare migration patterns and phased transition options
- Assemble a tested quantum-safe roadmap and assurance pack

## **Course Agenda**

### **Day 1: Quantum Exposure and Scope**

- Quantum Threat and Data-Longevity Exposure Map
- Harvest-Now-Decrypt-Later Risk Scenario
- Business Service and Critical Data Classification Matrix
- Cryptographic Transition Scope and Boundary Canvas
- Quantum-Safe Governance and Accountability Framework

### **Day 2: Discovery and Prioritization**

- Cryptographic Asset Discovery Method
- Algorithm, Key, Certificate, and Protocol Inventory Register
- Application, Infrastructure, and Third-Party Dependency Map
- Vulnerability, Criticality, and Migration Priority Scorecard
- Inventory Evidence and Ownership Control Log

### **Day 3: Target Architecture and Standards**

- Crypto-Agility Capability and Maturity Model
- FIPS 203 ML-KEM Transition Decision Matrix
- FIPS 204 ML-DSA and FIPS 205 SLH-DSA Use-Case Grid
- PKI, Certificate, and Trust-Service Target Architecture
- Hybrid and Staged Cryptographic Transition Pattern

### **Day 4: Migration Delivery and Assurance**

- Application and Infrastructure Migration Wave Plan
- Supplier Readiness and Contract Requirement Checklist
- Interoperability, Performance, and Failure Test Strategy
- Exception, Risk Acceptance, and Compensating-Control Register
- Transition Metrics, Assurance, and Executive Reporting Dashboard



## Day 5: Quantum-Safe Architecture Practice

- Suggested Exercise: Cryptographic Inventory Prioritization
- Suggested Exercise: PKI and Application Target-State Design
- Suggested Exercise: Supplier and Interoperability Decision
- Suggested Exercise: Migration Wave and Risk Briefing
- Capstone Exercise: Quantum-Safe Transition Architecture Pack

## Practical Exercises

The course uses suggested activities to convert cryptographic evidence into governed migration decisions.

- Suggested activity: prioritize cryptographic dependencies for a payment platform and long-lived healthcare records.
- Suggested activity: design a staged PKI and certificate transition for cloud and on-premises services.
- Suggested activity: assess supplier roadmaps and interoperability constraints across telecommunications and industrial systems.
- Suggested activity: present a migration roadmap with waves, tests, exceptions, risks, and assurance measures.

## FAQs

### Who suits post-quantum cryptography migration architecture training, and what does it assume?

Post-quantum cryptography migration architecture training suits architecture, security, PKI, risk, application, infrastructure, procurement, and transformation professionals who already work with enterprise security and cryptographic services.

### How does post-quantum cryptography migration differ from quantum-computing training?

Post-quantum cryptography migration focuses on enterprise cryptographic exposure, architecture, standards, dependencies, testing, suppliers, and delivery governance, while quantum-computing training explains computational concepts and technologies.

### Why does post-quantum cryptography migration require a cryptographic inventory?

A cryptographic inventory identifies algorithms, keys, certificates, protocols, libraries, systems, owners, data exposure, and dependencies so transition priorities and testing scope can be traced.

### What does crypto-agility contribute to a quantum-safe transition?

Crypto-agility provides governed mechanisms to replace or reconfigure algorithms, keys, certificates, protocols, and implementations without redesigning every dependent service for each future change.



## **What belongs in a quantum-safe transition architecture pack?**

A quantum-safe transition architecture pack contains exposure analysis, inventory, priorities, target patterns, standards decisions, PKI impacts, supplier requirements, migration waves, test strategy, exceptions, risks, assurance, and reporting measures.

## **Conclusion**

Participants leave with a Quantum-Safe Transition Architecture Pack containing an exposure map, cryptographic inventory, priority model, target architecture, standards decisions, supplier controls, test strategy, roadmap, and assurance measures. The pack changes isolated remediation into a traceable enterprise transition. It supports controlled decisions across applications, infrastructure, PKI, procurement, and risk governance.