

QUANTUM SECURITY & PQC

Quantum-Safe OT and Critical Infrastructure

SECTOR OVERVIEW

Plan post-quantum migration for industrial environments where safety, device lifetimes, limited resources and maintenance windows constrain change.

DURATION

3 hours

Short professional course

LEVEL

Intermediate

No formal prerequisites

ON-DEMAND FEE

US\$249

Online on-demand

Respect operational constraints.

WHAT YOU WILL LEARN

- ✓ Map cryptographic dependencies in industrial control and remote-access systems.
- ✓ Assess device lifetimes, update limits and safety-case constraints.
- ✓ Evaluate gateways, isolation and retirement for systems that cannot be upgraded.
- ✓ Align migration with maintenance windows, asset replacement and risk management.

WHO SHOULD ATTEND

OT security architects, control and automation engineers, safety engineers and security leaders in manufacturing, transport, water and other industrial sectors.

PREREQUISITES

None. Sector experience helps. Post-Quantum Foundation is an optional starting point.

Why Quantum Academy

Our faculty runs sector migration programs. The course applies the OT and Critical Infrastructure Extension of the Applied Quantum PQC Migration Framework.

What you will study

Sector-specific priorities for post-quantum migration.

01 Where OT Systems Use Cryptography

Identify cryptography in control systems, historians, remote access and inter-facility links. Assess processing limits, long device lifetimes and safety constraints.

02 Gateway-Based Migration

Evaluate gateway protection when endpoints cannot be upgraded. Consider protocol translation, real-time performance, protection boundaries and dual-protocol operation.

03 Safety-Case and Regulatory Considerations

Examine cryptographic change within safety cases and applicable frameworks, including IEC 62443 and NERC CIP where relevant. Assess change approvals and evidence.

04 Migration Planning for Long-Lived Assets

Align migration with maintenance and replacement cycles. Plan mitigation for assets that remain in service and assess protection of archived operational data.

Formats and fees

Online on-demand	US\$249
Live online	US\$379
In person	US\$499
Private team training	Custom quote

What is included

- Course handbook: full material with written instructor notes.
- 180 days of online on-demand access. Where that course is not yet published, the 180 days start on the day it is.
- PDF copy of Quantum Ready by Marin Ivezić, at no extra cost.

Includes a certificate of completion. This is not a professional certification.

Explore the course

View course details at QuantumAcademy.com



On-demand enrollment opens soon. Check the course page for live dates and availability.

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