

Quantum-Safe OT and Critical Infrastructure Intensive

Practitioner intensive

A full-day workshop for industrial operators planning a PQC migration program. Leave with an ownership register, asset triage, and year-one roadmap.

Duration

8 hours

Planning workshop

Level

Practitioner

No cryptography background needed

Fee

US\$1,499 live online

US\$1,999 in person

In an operational technology (OT) estate, much of the cryptography is built into equipment that engineering bought, an integrator commissioned, and a vendor maintains. No team at the operator chose that cryptography, and the vendor or the integrator often controls how it can change. On safety-critical devices, each cryptographic change also requires a safety-impact assessment and, for most of those devices, a planned maintenance window. In this workshop, you plan a post-quantum cryptography (PQC) migration program around who owns that cryptography and when it can change.

What you will build

- An estate map by Purdue level, showing who can change each part
- A program charter and steering committee structure
- An inventory plan with its tracks and starting records, and a cryptographic ownership register
- An initial priority list and triage, with a rationale for each decision
- A vendor dependency register that separates evidenced dates from assumptions, and draft tender requirements
- An external dependency map for regulators, standards bodies, and interconnected operators
- A workstream structure mapped to your maintenance windows and safety approvals
- A year-one plan by quarter, with board KPIs and the decisions you need from others

Who should attend

- Program managers and PMO leads
- OT security architects
- Control systems and automation leads
- Safety engineering
- Plant and site operations
- Procurement, vendor management, and regulatory compliance
- The CISO and chief engineer who will jointly sponsor the program

The intensive is for manufacturers, process plants, pipeline and transport operators, and anyone else running industrial control systems. We recommend sending a mixed group from one operator, ideally the people who would be members of its quantum readiness steering committee. Bring at least one person from safety engineering. Many of the sequencing decisions in this workshop are safety decisions.

Preparation

We recommend Quantum-Safe OT and Critical Infrastructure as preparation, though you can enroll without it. It covers the same ground at overview depth. You can work through the day with data from your own organization or with a sample industrial operator we provide.

Why Quantum Academy

This intensive is built on the OT & Critical Infrastructure Extension of the Applied Quantum PQC Migration Framework, published openly under Creative Commons at pqcframework.org. The course author wrote the framework and has led quantum readiness programs for critical infrastructure operators. The instructors run migration programs in this sector and teach the constraints they meet in that work.

Curriculum and enrollment

The day

The instructor starts each module with a short briefing. You then apply the module's template to your own estate or to the sample operator. In person, we teach the intensive from 09:00 to 17:00 local time, with lunch and two breaks:

09:00–09:50 · Module 1. The OT estate and who can change it

The instructor walks through what an OT migration covers, from remote access at the IT/OT boundary to safety systems, historians, and building systems.

09:50–10:40 · Module 2. Mandate, governance, and the business case

You define the steering committee, with OT engineering, process safety, and IT security as equal partners.

10:40–11:00 · Break

11:00–11:45 · Module 3. Inventory planning and ownership

You open a cryptographic ownership register that names who can change each embedded credential, key, and signing dependency, and who approves.

11:45–12:30 · Module 4. Risk scoring and triage

You tier each fully scored entry, then decide whether to migrate, encapsulate, isolate, or retire it, with a rationale you can defend to an auditor or a regulator.

12:30–13:30 · Lunch

13:30–14:20 · Module 5. Vendor management and the tender template

You adapt the extension's OT tender template, for use in every RFI, RFP, and contract renewal from the day the program is chartered.

14:20–15:10 · Module 6. Regulators, standards bodies, and interconnected operators

You record unpublished standards work as a dependency, such as the DNP3 Security Layer and the post-quantum revision of the IEC 62351 profiles.

15:10–15:30 · Break

15:30–16:15 · Module 7. Safety cases, maintenance windows, and program structure

You map each planned change to a maintenance window. With your safety authority, you decide for each change whether to reopen the safety case.

16:15–17:00 · Module 8. Year-one plan, KPIs, and the asks

You assemble the day's work into a year-one plan by quarter, from opening the ownership register to a first board report.

Live online, we teach it in two four-hour sessions on consecutive days, each with a short break. We cover Modules 1 to 4 in the first session and Modules 5 to 8 in the second.

Formats and fees

Format	Delivery	Fee
Live online	Two four-hour sessions on consecutive days	US\$1,499
In person	One day, 09:00 to 17:00 local time	US\$1,999
Private team training	Only your own colleagues attend	Quoted per engagement

What is included

- The course handbook, a PDF of the full material with the instructor notes written out
- A PDF copy of *Quantum Ready* by Marin Ivezić, the companion book to the framework the day draws on
- The working documents you build during the day, editable and yours to keep
- 180 days of access to the corresponding online on-demand course. Where that course is not yet published, the 180 days start on the day it is.
- A Quantum Academy certificate of completion. It confirms that you completed the course and is separate from Quantum Academy's professional certifications.

Explore the course

Dates and booking: quantumacademy.com/courses/quantum-safe-ot-critical-infrastructure-intensive/



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Prices as of October 2026.

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