



Executive Quantum Computing Strategy and Readiness Training Course

20 – 24 December 2026
Johannesburg

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Ref: 458_136875 **Date:** 20 – 24 December 2026 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Executive Quantum Computing Strategy and Readiness Training Course is a five-day executive course for business leaders, strategy executives, transformation directors, innovation managers, technology leaders, risk professionals, and investment decision-makers. Participants connect quantum concepts with capability boundaries, algorithms at decision level, market and vendor assessment, business use-case screening, data and talent readiness, hybrid computing, experimentation, investment cases, post-quantum security interfaces, governance, ethics, and roadmap decisions. They leave with a Quantum Business Readiness Roadmap. Agile Leaders Training Center delivers this course for evidence-based executive decisions without unsupported technology forecasts.

Who Should Attend

- Executives responsible for strategy, investment, innovation, and transformation portfolios
- Business-unit leaders evaluating emerging-technology opportunities and constraints
- CIOs, CTOs, enterprise architects, and technology portfolio managers
- Cybersecurity, risk, legal, procurement, and governance professionals
- Data, analytics, operations research, and research-and-development leaders
- Finance and investment teams reviewing experiments, partnerships, and business cases

No advanced mathematics or quantum programming is required. The course supports executive judgement and governance rather than technical engineering, vendor endorsement, or a promised timeline for commercial quantum advantage.

Departments and Industries

The course supports organizations assessing quantum opportunity, preparedness, ecosystem participation, and cryptographic transition risk.

- Financial services, insurance, investment, and capital-markets organizations
- Energy, logistics, aviation, manufacturing, mobility, and infrastructure businesses
- Healthcare, pharmaceuticals, materials, chemicals, and research institutions
- Government, defense-support, public service, and national innovation entities
- Technology, telecommunications, cloud, cybersecurity, and data organizations
- Strategy, transformation, venture, procurement, risk, and corporate-development teams

Learning Objectives

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

- Explain quantum computing concepts and capability boundaries in business language
- Distinguish promising problem classes from unsuitable or premature use cases
- Evaluate vendors, platforms, partnerships, talent, data, and experimentation needs
- Build a governed quantum experiment and investment decision process
- Connect quantum opportunity planning with post-quantum security readiness
- Build a Quantum Business Readiness Roadmap with evidence gates

Course Agenda

Day 1: Quantum Concepts for Executive Decisions

- Classical and Quantum Computing Comparison
- Qubits, Superposition, Entanglement and Interference
- Quantum Circuit, Measurement and Error Concepts
- Capability, Limitation and Uncertainty Map
- Executive Myth and Evidence Review

Day 2: Algorithms, Problem Classes and Use Cases

- Simulation, Optimization, Search and Sampling Overview
- Problem Structure and Quantum Suitability Screen
- Classical Baseline and Hybrid Workflow Design
- Industry Use-Case Evidence Assessment
- Business Value, Feasibility and Timing Matrix

Day 3: Market, Vendors and Organizational Readiness

- Quantum Hardware, Software and Cloud Ecosystem Map
- Provider Capability and Claim Evaluation
- Data, Integration and Architecture Readiness
- Talent, Partnership and Operating-Model Options
- Procurement, Intellectual Property and Dependency Risks

Day 4: Experiments, Investment and Risk Governance

- Experiment Charter and Learning Hypothesis
- Benchmark, Success Criterion and Evidence Plan
- Stage-Gate Funding and Portfolio Governance
- Ethical, Legal, Operational and Reputational Risks
- Cybersecurity Interface and Cryptographic Inventory



Day 5: Executive Quantum Strategy and Roadmap

- Suggested Exercise: Explain Quantum Capability to a Board
- Suggested Exercise: Screen and Prioritize Business Problems
- Suggested Exercise: Evaluate a Vendor and Experiment Proposal
- Suggested Exercise: Review Quantum-Safe Readiness Dependencies
- Capstone Exercise: Quantum Business Readiness Roadmap

Practical Exercises

The course uses suggested activities to turn emerging-technology signals into bounded experiments, governed investments, and reviewable executive choices.

- Suggested activity: explain a quantum concept, its possible relevance, its limitations, and the evidence required before making a business claim.
- Suggested activity: compare candidate problems against classical baselines, data availability, algorithm fit, hardware requirements, integration effort, value, and uncertainty.
- Suggested activity: assess provider claims, access models, ecosystem dependencies, talent needs, intellectual property, security, cost, and exit options.
- Suggested activity: combine opportunity priorities, experiment stages, decision gates, partnerships, capabilities, risks, cryptographic readiness, measures, and review dates in the capstone roadmap.

FAQs

What should business leaders know about quantum computing?

Leaders should understand how quantum information differs from classical computing, which problem structures may be relevant, the limits of current evidence, the role of hybrid workflows, and the organizational capabilities required to test claims responsibly.

Which business problems may be considered for quantum experiments?

Organizations commonly explore selected simulation, optimization, search, sampling, materials, chemistry, finance, logistics, and engineering problems, but each candidate needs a strong classical baseline, suitable formulation, measurable value, available data, and realistic resource requirements.

How should a quantum use case be screened?

Screening should examine strategic importance, problem structure, classical difficulty, data, algorithm relevance, hardware and error constraints, hybrid integration, business value, experiment cost, timeline uncertainty, security, ethics, and a clear stop-or-continue gate.



What belongs in a quantum experiment charter?

The charter should define the problem, hypothesis, classical benchmark, quantum method, data, partners, platform, resources, success criteria, controls, risks, intellectual property, decision owner, budget, milestones, evidence record, and exit conditions.

How does post-quantum cybersecurity relate to business strategy?

Quantum opportunity and cryptographic risk are separate but connected agendas. Leaders should coordinate technology exploration with cryptographic discovery, data-longevity assessment, supplier engagement, architecture planning, and migration governance led by qualified security teams.

How can executives avoid quantum hype?

Executives can require precise problem definitions, transparent assumptions, classical comparisons, reproducible evidence, independent review, staged funding, explicit uncertainty, bounded claims, decision gates, and willingness to stop experiments that do not produce useful learning.

Conclusion

Participants leave with a Quantum Business Readiness Roadmap containing a capability map, prioritized problems, use-case screens, classical baselines, vendor criteria, operating-model choices, talent and data needs, experiment charters, investment gates, risk controls, quantum-safe dependencies, measures, and review dates. The roadmap changes broad technology interest into a disciplined portfolio of decisions. It supports practical learning, controlled investment, credible communication, and adaptation as evidence develops.