



THE THREE-TIER QUANTUM SKILLS FRAMEWORK

Who needs quantum skills and what kind



EXPERT

Quantum hardware engineers, algorithm developers, and network architects requiring deep technical mastery grounded in advanced postgraduate research.

- ✓ Europe's university pipeline is strong here.



Deep technical mastery and research-led expertise.

EXPERT



PRACTITIONER

Software developers, data scientists, cybersecurity specialists, and engineers who will work alongside quantum systems and integrate quantum tools into existing workflows.



70%

of European quantum companies report difficulty hiring qualified staff, with the largest gap at this tier.
(QuIC, 2024)



Work alongside quantum systems and integrate quantum tools into existing workflows.

CRITICAL GAP TIER

PRACTITIONER



AWARENESS

Business leaders, policy makers, procurement officers, regulators, and informed citizens who will make decisions about quantum technology without necessarily operating it directly.



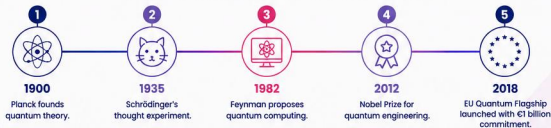
Estimated audience: millions across Europe.



Make informed decisions about quantum technology and its impact.

AWARENESS

EUROPE'S QUANTUM JOURNEY: KEY MILESTONES



Quantum skills are not only for physicists.

Europe needs all three tiers to realize its quantum potential.