

# Quantum for everyone

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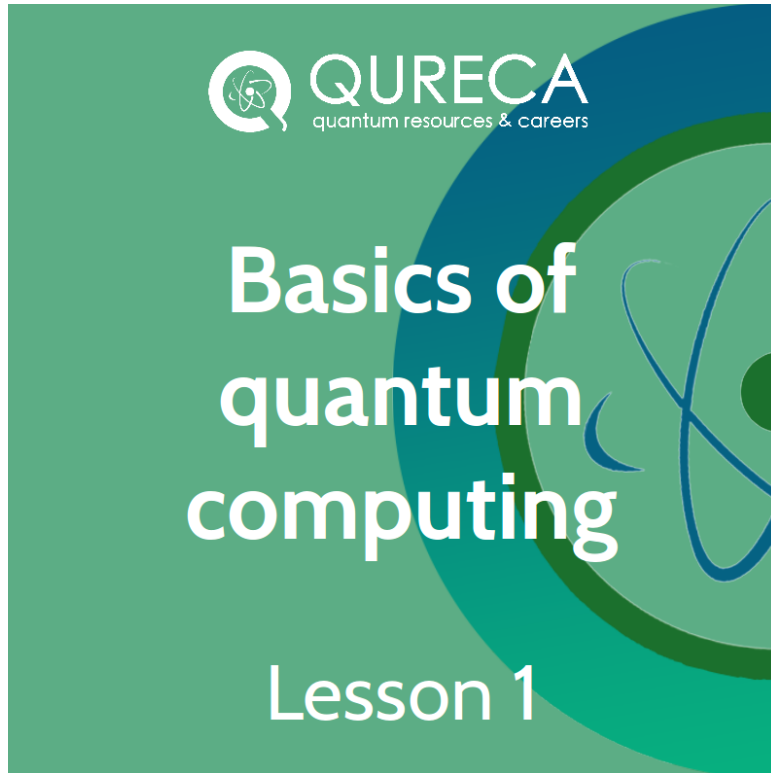
## Course intro



Araceli Venegas-Gomez, PhD

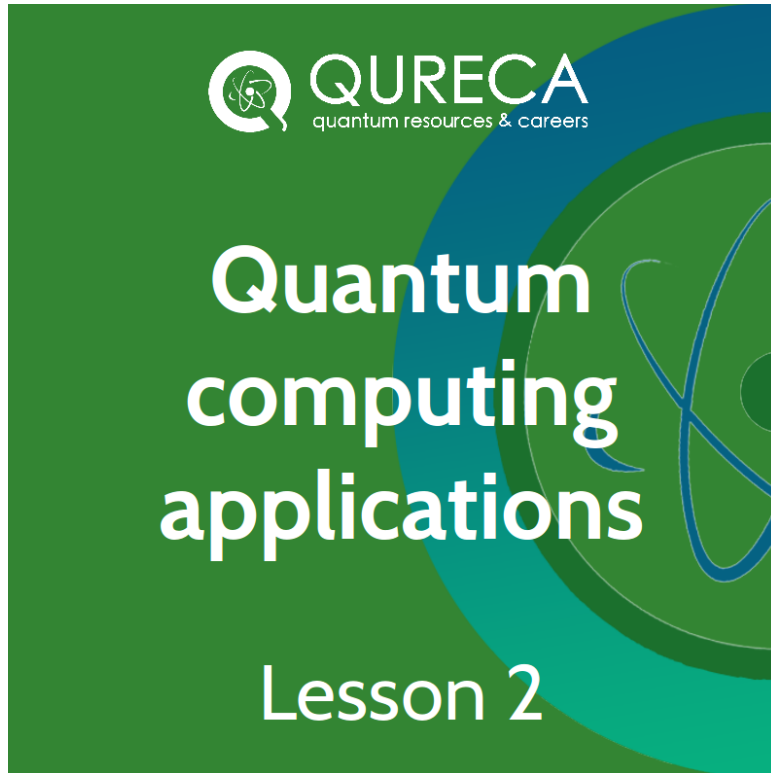
Bruno Fedrici, PhD

# Course syllabus



- ✓ What a quantum computer really is ?
- ✓ How fast are these machines ?
- ✓ Is quantum computing as a service a reality ?
- ✓ What is today state of the art ?
- ✓ What is the development roadmap for next years ?

# Course syllabus



- ✓ Which maths problems are suitable for application on a quantum computer ?
- ✓ How chemistry and pharma labs can benefit from quantum computing ?
- ✓ Why some financial institutions are investing in this technology ?
- ✓ What about the players of the automotive and the energy industries ?
- ✓ Which verticals are expected to be early beneficiaries ?

# Course syllabus



- ✓ Do quantum computers put our digital security at risk ?
- ✓ What are quantum resistant algorithms and quantum cryptography ?
- ✓ How these technologies can keep cyber-physical systems secured in the presence of a quantum computer ?
- ✓ What is a methodology for quantum risk assessment ?

# Course syllabus



- ✓ What has been set in place in terms of national initiatives ?
- ✓ Who are the actors of the quantum industry ?
- ✓ How much investment has been raised ?
- ✓ How to initiate a first use case ?
- ✓ How to deploy a sustainable strategy ?
- ✓ Where to find more training resources ?