QWorld Quantum Hardware Education Challenge

In this challenge, we invite you to develop an **interactive quantum hardware module** for QWorld!

QWorld currently offers the comprehensive Quantum Programming modules QBronze, QSilver and QNickel. In this challenge, you will expand the QWorld curriculum with an exciting interactive module on a **hardware implementation of your choice**: from superconducting qubits and Qiskit Metal to topological quantum computing.

Output of the challenge

The education module can include, for example:

- Lecture slides and short videos
- Quizzes
- Jupyter notebooks with exercises (calculation and programming)
- Use of external interactive tools

Main target group for the education module

Computer science students with high-school knowledge of physics

Suggestions for topics

- Quantum Mechanics for Computer Scientists
- Superconducting Quantum Computing
- Introduction to Qiskit Metal
- Trapped-ion Quantum Computing
- Photonic Quantum Computing
- Topological Quantum Computing
- Your own suggestion

Compete with the teams with other topics and the best module(s) will be chosen as the winner(s) of the challenge!