

**Complementing courses that can be taken by students interested to learn more:**

Topic	Course	Semester (CP)	Location
Basics of quantum information processing	Quantum Information Theory	WS and SS (6)	UoC
	Quantum Information (part 1)	SS (5)	RWTH
	Quantum Technology (partially)*	SS (6)	UB
AMO (atomic, molecular, optical) platforms	Quantum Optics (partially)	WS (6)	UB
	Advanced AMO	WS (6)	UB
	Hardware platforms for QT (parts – not into depth)	WS (5)	RWTH
Solid state platforms	Hardware platforms for QT	WS (5)	RWTH
	Experimental quantum computing with superconducting qubits	SS (5)	RWTH
	Introduction to superconducting qubits	SS (?)	UoC
Topological platforms	Topological Matter and Quantum Computing	WS (3)	UoC
	Hardware platforms for QT (parts – not into depth)	WS (5)	RWTH
Quantum error correction and topological codes	Quantum Information (part 2)	SS (5)	RWTH

\*builds on Quantum Optics

Students from Aachen interested in course offered in Cologne or Bonn, as well as students from Cologne/Bonn interested in course from Aachen should contact the ML4Q Research School Coordinator