

Specialization A

Core courses example 1

Quantum mechanics for
non-physicists

Introduction to Quantum
science and technology

Introduction to Quantum
Information Processing

Introduction to Quantum
Computation

Specialization A

Core courses example 2

Introduction to Quantum
science and technology

Solid State Systems for
Quantum Information

Semiconductors devices I

Introduction to Quantum
Computation

Specialization A

Options Example 1

Information Theory and Coding

Algorithms II

Optimization for machine learning

Quantum Information Theory

Computational Quantum Physics

Quantum optics and quantum information

Computational Methods in Molecular
Quantum Mechanics

Specialization A

Options Example 2

Information Theory and Coding

Cryptography and security

Machine learning

Quantum Information Theory

Computational Quantum Physics

Quantum Electrodynamics and
Quantum Optics

Molecular quantum
dynamics