

1 Sample Study plans

Below are three sample study plans for students holding a BSc in Mathematics, Computer Science or Physics, starting in the winter semester. These are merely recommendations; in particular, students are free to include courses from other departments, regardless of their previous academic background.

It is recommended that you start in the winter term. If you do start in the summer term, you can swap 'Mathematical Foundations of QIT' for 'Quantum Algorithms'. However, there may be some gaps in the content.

Basics of QIT

Advanced QIT

Interdisciplinary

Seminars and Master Thesis

Free Points

1.1 Sample study plan, starting in the winter semester (following on from a BSc in a Mathematics degree programme)

Module	1. Sem.	2. Sem.	3. Sem.	4. Sem.
	Mathematical Foundations of QIT (9 CP)	Quantum Algorithms (9 CP)	Master's Seminar (12 CP)	Master's Thesis (30 CP)
	Core Lecture Mathematics (9 CP)	Advanced Lecture QIT 1 (4,5 CP)	Advanced Lecture QIT 2 (4,5 CP)	
	Advanced Lecture Mathematics (4,5 CP)	Project QIT (6 CP)	Seminar in QIT (7 CP)	
	Proseminar in Mathematics (5 CP)	Lecture in Physics (8 CP)	Advanced Lecture Mathematics (4,5 CP)	
	Elements of Physics (irregularly) (3 CP)		Tutoring (4 CP)	
SWS				
CP	30,5	27,5	32	30

Total CP	120
----------	-----

1.2 Sample study plan, starting in the winter semester (following on from a BSc in a Computer Science degree programme)

Module	1. Sem.	2. Sem.	3. Sem.	4. Sem.
	Mathematical Foundations of QIT (9 CP)	Quantum Algorithms (9 CP)	Master's Seminar (12 CP)	Master's Thesis (30 CP)
	Advanced Lecture in CS (6 CP)	Advanced Lecture QIT 1 (4,5 CP)	Advanced Lecture QIT 2 (4,5 CP)	
	Advanced Lecture in CS (6 CP)	Project QIT (6 CP)	Seminar in QIT (7 CP)	
	Seminar in CS (7 CP)	Advanced Lecture in CS (6 CP)	Advanced Lecture in CS (6 CP)	
	Elements of Physics (irregularly) (3 CP)	Tutoring (4 CP)		
SWS				
CP	31	29,5	29,5	30

Total CP 120

1.3 Sample study plan, starting in the winter semester (following on from a BSc in a Physics degree programme)

Module	1. Sem.	2. Sem.	3. Sem.	4. Sem.
	Mathematical Foundations of QIT (9 CP)	Quantum Algorithms (9 CP)	Master's Seminar (12 CP)	Master's Thesis (30 CP)
	Core lecture Physics (8 CP)	Advanced Lecture QIT 1 (4,5 CP)	Advanced Lecture QIT 2 (4,5 CP)	
	Lecture in Physics (5 CP)	Project QIT (6 CP)	Seminar in QIT (7 CP)	
	Advanced Physics Practical Course (7 CP)	Core Lecture in Mathematics (9 CP)	Lecture in Physics (5 CP)	
			Language Course (4 CP)	
SWS				
CP	29	28,5	32,5	30

CP Gesamt 120