

Seminar Topics

Advanced Topics in Formal Semantics

(Summer 2025)

First name: _____

Surname: _____

Matriculation no.: _____

 Study programme: BSc Informatik MSc Informatik MSc SSE Other: _____

 Nickname: _____
 (to be displayed on web page in place of real name, if desired)

Please choose your three preferred topics from the following list (1st/2nd/3rd choice):

No.	Title	1.	2.	3.
A. Hoare Logic				
1	Hoare Logics for Recursive Procedures and Unbounded Nondeterminism			
2	Incorrectness Logic			
3	Outcome Logic			
4	A Taxonomy of Hoare-Like Logics			
B. Separation Logic				
1	Introduction to Separation Logic			
2	Formalising Memory Safety			
3	Semantics of Concurrent Pointer Programs			
C. Software Verification				
1	Reasoning About Termination			
2	Verification by Transformation			
D. Static Analysis of Quantum Programs				
1	The QChecker Static Analysis Framework			
2	The LintQ Static Analysis Framework			
3	Entanglement Analysis			