

Module Overview B. Sc. Computer Science (9 Semesters)

Degree Programme Guidelines as per 01.10.2015, Version 01.10.2016

The degree programme consists of 180 Credit Points (CP) in total:

- ▶ **Mandatory area:** 135 CP ■
- ▶ **Elective area:** 33 CP ■
- ▶ **Bachelor's Thesis:** 12 CP ■

Language of Tuition:
GERMAN
Certificates required



This leads to the following *possible* part-time semester course schedule:

1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester	8. Semester	9. Semester	
Mentoring System (0 CP)	Algorithms and Data Structures (10 CP)	Digital Design (5 CP)	Computer Organisation (5 CP)	Introduction to Compiler Construction (5 CP)	Computational Engineering und Robotics (5 CP)	Modeling, Specification and Semantics (5 CP)	Computer Networks and Distributed Systems (5 CP)	Bachelor's Thesis (12 CP)	
Mathematic I (for Computer Science) (9 CP)	Mathematic II (for Computer Science) (9 CP)	Automata, Formal Languages and Decidability (5 CP)	Propositional Logic and Predicate Logic (5 CP)	Architecture and Design of Computer Systems (5 CP)	Formal Methods in Software Design (5 CP)	Visual Computing (5 CP)	Practical Lab for Bachelors (9 CP)		
Functional and Object-Oriented Programming Concepts (10 CP)		Software Engineering (5 CP)	Information Management (5 CP)	Systems and Parallel Programming (5 CP)	Mathematics III (for Computer Science) (8 CP)				
		Computer Security (5 CP)		Operating Systems (5 CP)					
			Optional Subject Area* (12-18 CP)						
			Subject Achievements (12-15 CP)						
			Interdisciplinary Subjects (3-6 CP)						
19 CP	19 CP	20 CP	21 CP	20 CP	21 CP	20 CP	20 CP		20 CP

* Courses from 6 areas of the Department of Computer Science (IT Security; Networks and Distributed Systems; Robotics, Computational and Computer Engineering; Software Systems and Formal Foundations; Visual & Interactive Computing; Web, Knowledge and Information Processing)