

Module Overview B. Sc. Computer Science (12 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
Mentoring System (0 CP)	Algorithms and Data Structures (10 CP)	Mathematic I (for Computer Science) (9 CP)	Mathematic II (for Computer Science) (9 CP)	Software Engineering (5 CP)	Mathematic III (for Computer Science) (8 CP)
Functional and Object-Oriented Programming Concepts (10 CP)	Computer Organisation (5 CP)	Automata, Formal Languages and Decidability (5 CP)	Propositional Logic and Predicate Logic (5 CP)	Computer Security (5 CP)	Information Management (5 CP)
Digital Design (5 CP)				Introduction to Compiler Construction (5 CP)	Computational Engineering und Robotics (5 CP)
15 CP	15 CP	14 CP	14 CP	15 CP	18 CP
7. Semester	8. Semester	9. Semester	10. Semester	11. Semester	12. Semester
Architecture and Design of Computer Systems (5 CP)	Computer Networks and Distributed Systems (5 CP)	Operating Systems (5 CP)		Practical Lab for Bachelors (9 CP)	Bachelor's Thesis (12 CP)
Systems and Parallel Programming (5 CP)	Formal Methods in Software Design (5 CP)	Visual Computing (5 CP)			
Modeling, Specification and Semantics (5 CP)	Optional Subject Area* (12-18 CP)				
	Subject Achievements (12-15 CP)				
	Interdisciplinary Subjects (3-6 CP)				
15 CP	15 CP	15 CP	15 CP	14 CP	15 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)