

# Module Overview B. Ed. Computer Science (12 Semesters) Variant A

Degree Programme Guidelines as per 01.10.2014, Version 01.10.2017

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

## Vocational Field of Studies

- ▶ Specialised Science: 100 CP
- ▶ Subject-related Didactics: 20 CP
- ▶ Bachelor's Thesis: 10 CP
- Educational and Social Sciences: 30 CP

## Non-vocational Field of Studies

- ▶ Specialised Science: 10 CP
- ▶ Subject-related Didactics: 10 CP



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

**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
Foundations of Computer Science I <sup>5</sup> (10 CP)	Didactics of Computer Science I (5 CP)	Mathematics I for Computer Science (9 CP)	Foundations of Computer Science II <sup>6</sup> (10 CP)	Didactics of Computer Science II (5 CP)	
	Formal Principles of Computer Science I (5 CP)		Formal Principles of Computer Science II (5 CP)	Technical Foundations of Computer Science <sup>2</sup> (12 CP)	
Elective area: Special Areas of Computer Science					
Fundamentals of Vocational Pedagogy (5 CP)	Teaching and Learning in Vocational Education (9 CP)		Practical Studies in School I or Vocational Extracurricular Studies I (10 CP)		
Social Sciences					
Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP
7. Semester	8. Semester	9. Semester	10. Semester	11. Semester	12. Semester
Foundations of Computer Science III <sup>3</sup> (10 CP)	Didactics of Computer Science III (5 CP)		Practical Lab for Bachelors (6 CP)	Bachelor's Thesis <sup>1</sup> (10 CP)	
	Proseminar in Didactics (5 CP)		Project Management (3 CP)		
Elective area: Special Areas of Computer Science (30 CP)					
	Non-vocational Field of Studies: Specialised Science <sup>4</sup> (10 CP)				
	Non-vocational Field of Studies: Subject-related Didactics <sup>4</sup> (10 CP)				
Social Sciences (6 CP)					
Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP

<sup>1</sup> The Bachelor's Thesis is part of the specialised science of the vocational field of studies.

<sup>2</sup> „Technical Foundations of Computer Science“ consists of „Digital Technology“ and „Computer Organization

<sup>3</sup> „Foundations of Computer Science III „ consists of „ Operation Systems „ and „ Systems and Parallel Programming“.

<sup>4</sup> A general education subject can be chosen from the following: German; ethics; history; mathematics; physics; politics and economics; Protestant religion; Catholic religion or sports science.

<sup>5</sup> „Foundations of Computer Science I“ renamed to „Functional and Object-Oriented Programming Concepts“.

<sup>6</sup> „Fundamentals of Computer Science II“ renamed to „Algorithms and Data Structures“.