

Module Overview B. Sc. Physics - 12 Semesters

Degree Programme Guidelines as per 01.10.2022, Version 01.10.2022 (SB2022II)

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

Experimental Physics:	39 CP	■	Mathematics:	32 CP	■
Theoretical Physics:	43 CP	■	Interdisciplinary Elective Area:	16 CP	■
Laboratories:	35 CP	■	Bachelor's Thesis:	15 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
Physics I (7 CP)	Physics II (7 CP)	Analysis I (8 CP)	Analysis II (8 CP)	Physics III (7 CP)	Physics IV (5 CP)
Linear Algebra I (for physics and teaching (mathematics)) (4 CP)	Linear Algebra II (for physics and teaching (mathematics)) (4 CP)	Physical Basis Laboratory III And Compact Course (4+1 CP)	Classical Mechanics (8 CP)	Quantum Mechanics (8 CP)	General and Overarching Concepts of Experimental Physics (3 CP)
Physical Basis Laboratory I (4 CP)	Physical Basis Laboratory II (4 CP)				Classical Particles and Fields (8 CP)
Calculation Methods for Physicists (5 CP)					
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
Physics V (5 CP)	Overarching Concepts (6 CP)	Physics VI (5 CP)			Bachelor's Thesis (15 CP)
Complex Analysis (4 CP)	Computational Physics (6 CP)	Ordinary Differential Equations (4 CP)	Elective subjects interdisciplinary (11-16)** and Elective Subject Area Physics (0-5)		
Thermodynamics and Statistical Physics (8 CP)		Laboratory Course for Advanced Students I + II (16 CP)*			
Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP	Ø 15 CP

* Precondition for participation: Completed module 05-15-2213 Physical Basis Laboratory .

** These courses may be chosen from the general TU Darmstadt course catalogue.