

# Module Overview B.Sc. Materials Science - 9 Semesters

Degree Programme Guidelines as per 01.10.2015, Version: 01.10.2017 (SB2017II)

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

Mandatory Subject Area: 124 CP ■  
 Mandatory Laboratories: 21 CP ■

Elective Subject Area: 20 CP ■  
 Bachelor's Thesis/Colloquium: 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	7. Semester	8. Semester	9. Semester
MaSc I: Crystallography and Crystal Chemistry (5 CP)	MaSc II: Thermodynamics of Solid State Bodies (4 CP)	MaSc III: Real Crystals and their Properties (5 CP)	Materials Engineering (5 CP)	MaSc V: Diffusion and Transport in Real Crystals (5 CP)	Numerical Methods of Materials Science (3 CP)	MaSc VI: Crystal and Electronic Structure of Solid State Bodies (5 CP)	Bachelor's Thesis (12 CP)	
Introduction to MaSc (1 CP)	Mathematics for Civil Engineers II (8 CP)	Basic Lab I (3 CP)	Basic Lab II (3 CP)	Characterisation Methods in Materi- als Science (6 CP)	Structural Materials (6 CP)	Study Project (2 CP)		
Mathematics for Civil Engineers I (8 CP)	Physics for Material Scientists II (5 CP)	Mathematics for Civil Engineers III (8 CP)	Physical Chemistry I (6 CP)	Basic Lab III (3 CP)	Advanced Lab I (3 CP)	Advanced Lab II (3 CP)	MaSc IV: Mechanical Properties (6 CP)	Colloquium (3 CP)
Physics for Material Scientists I (5 CP)	Physics Laboratory Course for Material Science (II) (3 CP)			General Chemistry (5 CP)	Introduction to Electrical Engineering (6 CP)	Physical Chemistry II (6 CP)	MaSc VII: Functional Proper- ties of Condensed Matter (6 CP)	
Physics Laboratory Course for Material Science (I) (3 CP)						Technical Mecha- nics for Materials Scientists (6 CP)	Research Seminar (2 CP)	
					Non-Technical-Scientific Elective Subjects modules from all departments and from the „Interdisziplinäre Studienschwer- punkte“ at TU Darmstadt (6 CP)			
				Technical-Scientific Elective Subjects modules from the mathematic-scientific-technical area which is not part of Materials Science (14 CP)				
22 CP	20 CP	16 CP	14 CP	Ø 22 CP	Ø 21 CP	Ø 26 CP	Ø 17 CP	Ø 22 CP