

# Course of Study Materials Science (Study Cohort w20)

Legend	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Sample course plan C Master Materials Science (MAMS)

## Specialisation Engineering Materials

1	<b>Phenomena and Methods in Materials Science</b>		<b>Multiphase Materials (part 2)</b>		<b>Advanced Functional Materials</b>		<b>Master Thesis</b>
2	Phase equilibria and transformations	VL 2	Polymer Composites	VL 2	Advanced Functional Materials	SE 2	
3	Experimental Methods for the Characterization of Materials	VL 2					
4			<b>Advanced Laboratory Materials Sciences</b>				
5			Advanced Laboratory Materials Sciences	PR 6			
6							
7	<b>Multiphase Materials (part 1)</b>				<b>Study work on Modern Issues in the Materials Sciences</b>		
8	Lecture: Multiscale Materials	VL 6					
9							
10	<b>Materials Physics and Atomistic Materials Modeling</b>		<b>Mechanical Properties</b>				
11	Materials Physics	VL 2	Mechanical Behaviour of Brittle Materials	VL 2			
12	Quantum Mechanics and Atomistic Materials Modeling	VL 2	Dislocation Theory of Plasticity	VL 2			
13	Exercises in Materials Physics and Modeling	GÜ 2					
14							
15							
16	<b>Applied Computational Methods for Material Science</b>		<b>Fibre-polymer-composites</b>				
17	Applied Computational Methods for Material Science	PBL 3	Design with fibre-polymer-composites	VL 2			
18			Structure and properties of fibre-polymer-composites	VL 2			
19							
20					<b>Examination of Materials, Structural Condition and Damages</b>		
21					Examination of Materials, Structural Condition and Damages	VL 3	
22	<b>Polymers</b>				Examination of Materials, Structural Condition and Damages	GÜ 1	
23	Structure and Properties of Polymers	VL 2					
24	Processing and design with polymers	VL 2					
25							
26							
27							
28							
29							
30							
Business & Management (from catalogue) - 6LP							
Non-technical Courses for Master (from catalogue) - 6LP							

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.

