

Masterstudium Chemistry and Physics of Materials								
Module	Course	SSt.	Type	ECTS	Semester with ECTS			
					I	II	III	IV
<b>(1) Mandatory modules</b>								
<b>Module CPM 01: Foundations of Materials Science</b>								
CPM 01.1	Chemistry of Materials I	3	VO	3	3			
CPM 01.2	Chemistry of Materials I	2	VU	2	2			
CPM 01.3	Physics of Materials	3	VO	3	3			
CPM 01.4	Functional Materials	2	VO	2	2			
CPM 01.5	Chemistry of Materials II	2	VO	2		2		
Module CPM 01		12		12	10	2		
<b>Module CPM 02: Materials Characterization</b>								
CPM 02.1	Materials Characterization I (Scattering and Diffraction)	3	VU	4	4			
CPM 02.2	Materials Characterization II (Microscopy)	2	VO	2		2		
CPM 02.3	Materials Characterization III (Thermophysical Properties & Thermal Analysis)	2	VO	2		2		
CPM 02.4	Materials Characterization IV (Elemental Analysis and Spectroscopy)	3	VU	4		4		
Module CPM 02		10		12	4	8		
<b>Module CPM 03: Computation in the Natural Sciences</b>								
CPM 03.1	Computational Thinking	2	VU	3	3			
CPM 03.2	Programming in the Natural Sciences	2	VU	3	3			
Module CPM 03		4		6	6			
<b>Module CPM 04: Materials Life Cycle</b>								
CPM 04.1	Sustainability Report and Project Management	1	VO	1	1			
CPM 04.2	Materials Selection	2	VU	3		3		
CPM 04.3	Resource Management, Recovery and Recycling	2	VO	2		2		
Module CPM 04		5		6	1	5		
<b>Module CPM 05: Bulk and Interfaces</b>								
CPM 05.1	Mechanical Properties of Materials	2	VU	3	3			
CPM 05.2	Interface Science and Engineering	2	VO	2		2		
CPM 05.3	Seminar Materials Science	1	SE	1		1		
Module CPM 05		5		6	3	3		
<b>Module CPM 06: Industrial Aspects of Materials Science</b>								
CPM 06.1	Health, Safety and Regulation	2	VO	2		2		
CPM 06.2	Intellectual Property Rights	1	VO	1		1		
CPM 06.3	Materials Science in Industry	3	EX	3			3	
Module CPM 06		6		6		3	3	
<b>Module CPM 07: Materials and Sustainability Lab</b>								
CPM 07.1	Materials and Sustainability Lab	6	PR	6			6	
Module CPM 07		6		6			6	
Sum Mandatory modules		48		54	24	21	9	
<b>(2) Specialisation Module pursuant to § 6</b>								
The ECTS credits to be completed within the specialisation module are listed. To fulfil these requirements, the courses specified in the module description may be freely selected.								
<b>Module CPM 08: Functional and Sustainable Materials</b>				18		9	9	
Sum Specialisation Module				18		9	9	
<b>(3) Free electives</b>				12	6		6	

<b>(4) Transversal Module</b>							
Freely selectable courses from the pool of courses addressing topics related to socio-ecological crises							
Transversal module			6			6	
<b>(5) Master's thesis</b>							
			28				28
<b>(6) Board Masters exam</b>							
			2				2
<b>Sum total</b>		Sum SSt.	120	30	30	30	30