AMIR: M2 TUD HOST UNIVERSITY (second year students)

AUTUMN SEMESTER			
Code	Name	ECTS	Comments
Compulsory			
11-01-4198	Advanced Research Lab (12)	12	Lab work
11-01-4105	Surfaces and Interfaces	5	
11-01-4104	Functional Materials	6	
13-K3-M020	Life cycle assessment of products and systems	3	I&ENT
Elective courses **			
11-01-7342	Ceramic Materials: Syntheses and Properties. Part II	4	
11-01-2009	Concepts in Materials Physics	6	
11-01-7562	Computational Material science**	5	
11-01-7301	Electrochemistry in Energy Applications II:	4	
11-01-8131	Engineering Microstructures - Processing, Char. and Application	4	
11-01-2027	Finite Element Simulation in Material Science	4	
11-01-9063	Focused Ion Beam Microscopy: Basics and Applications	4	
11-01-8202	Fundamentals and Techniques of Modern Surface Science	4	
11-01-2016	Interfaces - From wetting to friction	4	
11-01-7892	Introduction to Scanning Electron Microscopy	1	
11-01-2001	Magnetism and Magnetic Materials	4	
11-01-7292	Materials Chemistry	4	
11-01-4404	Materials Science for Renewable Energy Systems	5	
11-01-3018	Mathematical Methods in Materials Science	4	
11-01-9332	Mechanical Properties of Ceramic Materials	4	
11-01-2006	Mechanical Properties of Metals	4	
11-01-2028	Metastable Materials: Structure, Properties and Processing	4	
11-01-7070	Micromechanics and Nanostructured Materials	4	
11-01-4109	Micromechanics for Materials Science *	6	
11-01-9090	Modern steels for automotive applications	4	
11-01-2026	Organic Functional Materials: From LCD to Molecular Circuits	4	
11-01-3031	*Polymer Materials*	6	
11-01-2023	Porous Ceramics for Energy-Related Applications	4	
11-01-4004	Quantum Mechanics for Materials Science	6	
11-01-8162	Semiconductor Interfaces	4	
	TOTAL	**30**	
SPRING SEMESTER	THESIS	**30**	

** All eligible ***"Elective courses"*** are listed in "*elective courses M. Sc. Materials Science*" in the TUCaN system. Students without a bachelor degree in Materials Science or Physics can also use the course "Concepts in Materials Physics (6 ECTS)" on request.

° The module "**Discussion with Mentor**" is voluntary but recommended