

Study Plan Bachelor of Science in Materials Science at TU Darmstadt, Study Regulations 2024 (180 CP)

Language of Tuition: GERMAN - certificates required

This module overview is a translated and abbreviated easy-to-read version of the official course schedule as defined in the examination regulations, to be found in the "Satzungsbeilagen of TU Darmstadt".

1st Semester	CP	2nd Semester	CP	3rd Semester	CP	4th Semester	CP	5th Semester	CP	6th Semester	CP
Fundamentals of Materials Science (Materials Science I)	6	Thermodynamics of Solid State Bodies (Materials Science II)	5	Real Crystals and their Properties (Materials Science III)	5	Mechanical Properties (Materials Science IV)	6	Diffusion in Solid State Bodies (Materials Science V)	5	Functional Properties of Condensed Matter (Materials Science VII)	6
Mathematics I (Civil Eng.)	8	Mathematics II (Civil Eng.)	8	Mathematics III (Civil Eng.)	8	Sustainable Material Production and Processing	5	Crystal and Electronic Solid State Structure (Materials Science VI)	5	Structural Materials	6
General Chemistry	5	Physical Chemistry I	6	Characterisation Methods in Materials Science	6	Numerical Methods in Materials Science	3	Seminar: Study project and Scientific presentations	5	Bachelor Thesis and Colloquium	15
Physics I	5	Physics II	5	Technical Mechanics for Materials Science	6	Circular Materials*	5	Machine Learning for Materials Science*	6		
Physics Lab	3					Introduction to Electrical Engineering	6	Physical Chemistry II	6		
Basic Programming Course	3	Basic Materials Science Lab I	3	Basic Materials Science Lab II	3	<i>Elective Courses Materials Science: 2 out of these 3 modules = 12 CP</i>					
						Advanced Materials Science Lab I	3	Advanced Materials Science Lab II	3		
Technical-Scientific Elective Courses (freely distributable over semesters)									10		
General Studies (freely distributable over semesters)									6		
Mentoring			0								
Orientation Week			0								

Mathematics and Natural Science Basics (Compulsory)	45 CP	Compulsory Complementary Technology Courses	6 CP	Bachelor Thesis	15 CP
				Compulsory Courses Materials Science	68 CP
Elective Courses Materials Science (12 CP)	0 - 6 CP		0 - 6 CP		0 - 6 CP
Elective Courses Natural Sciences/Technology	10 CP	General Studies	6 CP	Compulsory Lab Courses	18 CP
Recommended Supplementary Offers	0 CP			Sum	180 CP

Legend:

CP = Credit Points (ECTS system)

* English & German