Materials Science and Engineerung: course programm (90 CPs) and thesis, coll. (30 CPs)

Stand 22.06.2023 - v20

	CP				V	Ü	P	S	Winter (WS)/ Summer (Sose)	Lecturer
Compulsory Modules	8	ITB.2.0111.0.P	Solid State Physics and Semiconductors		4	1	0	2	WS	Mertins
	8	ITB.2.0034.0.P	Dielectrics and Ceramics		3	1	3	0	Sose	Gregor
24 CP	8	ITB.2.0067.0.P	Macromolecular Chemistry and Polymer Application		3	1	3	0	WS	Schäferling
Project Work	4	ITB.2.0098.1.T	Literature Research	Literature Research	0	0	0	1	WS/Sose	
Compulsory Modules	4	ITB.2.0098.2.T	Project Work	Project Work	0	0	0	1	WS/Sose	
12 CP	4	ITB.2.0098.3.T	Project Work	Project Work	0	0	0	1	WS/Sose	
Electives I	6	CIW.2.0058.0.P	Advanced Organic Materials		3	2	0	0	Sose	Schäferling
Common Subjects	6	ITB.2.0007.0.P	Advanced Physical Chemistry		3	0	3	1 (2)	Sose	Bredol
	6	CIW.2.0063.0.P	Aerosol- and Nanotechnology		2	1	3	0	Sose	Salameh
	6	ITB.2.0010.0.P	Analytics of Plastics and Polymers		3	1	1	0	WS	Kreyenschmidt
	6	CIW.2.0065.0.P	Applied Process Development		0	2	0	2	WS	Salameh
	6	ITB.2.0028.0.P	Chemical Nanotechnology		3	0	0	2	WS	Bredol
	6	CIW.2.0053.0.P	Chemical Sensors		3	1	1	0	Sose	Schäferling
	6 (3)	CIW.2.0067.0.P	Hazardous Substances: Regulations and Risks (Gefahrstoffkunde)		2 (2)	2 (2)	2 (0)	0	WS	Schupp
	6	ITB.2.0045.0.P	Incoherent Light Sources		3	1	0	1	Sose	Jüstel
	6	ITB.2.0066.0.P	Life-Cycle Assessment		3	1	0	2	Sose	Schupp
	3	ITB.2.0084.0.P	Modern Crystallographic Methods		2	1	0	0	Sose	Jüstel
	6	ITB.2.0090.0.P	Optical and electrical characterization of Materials		3	1	1	0	WS	Bredol
	6	CIW.2.0062.0.P	Particle Technology		2	1	3	0	WS	Salameh
	6	ITB.2.0096.0.P	Project Management		3	1	1	0	WS	Guderian
	6	ITB.2.0120.0.P	Technology of Coatings		3	2	0	0	WS	Schäferling
	6	PHY.2.0127.0.P	Batterieproduktion / Battery Production		2	2	0	0	WS	Mertins
	6	ITB.2.0018.0.P	Biomedical Materials		3	1	1	0	Sose	Gregor
	5	PHY.2.0108.0.P	Entwicklung von MOEMS mit der FEM		2	0	2	0	Sose	Chlebek
	5	PHY.2.0031.0.P	Halbleitertechnologie zur Entwicklung von MOEMS		2	1	0	0	WS	Chlebek
	6	ITB.2.0164.0.P	Lasermaterialbearbeitung		2	0	2	0	WS	Gurevich
	6	PHY.2.0059.0.V.1	Laserphysik		2	1	2	0	WS	Gurevich
	6	ITB.2.0082.0.P	Microscopy/Surface Science		3	0	2	0	Sose	Mertins
	6	PHY.2.0121.0.M	Quantum Sensors		1	1	0	2	SoSe	Gregor/ Glösekötter
	6	ITB.2.0112.0.P	Quantum Statistical Physics		3	2	0	0	Sose	Morawetz
	6	MB.2.0063.0.P	Innovative Materials		3	1	1	0	Sose	Gevelmann
	6	ETI.2.0022.0.P	Fortgeschrittene Energiespeichertechnologie		2	0	0	2	Sose	Job
	6	ITB.2.0024.0.P	Business Simulation		0	0	4	0	Sose	Elfering/ Schwanitz
Electives I	6	ITB.2.0006.0.P	Advanced Inorganic Chemistry		2	1	2	0	WS	Kynast
special subjectives only for Chemistry	6	ITB.2.0029.0.P	Chemical Technology of Materials		3	1	1	0	WS	Jüstel, Kynast
students Min. 42 CP	6	ITB.2.0081.0.P	Membrane Separations		3	1	2	0	Sose	Jordan
Electives II		ITB.2.0168.0.P	Arbitrary Module						WS/Sose	
	3	PHY.2.0107.0.P	Basics in Physics		2	0	0	0	WS	Mertins
	3	CIW.2.0060.0.P	Chemistry for Engineers		2	1	0	0	Sose	Möller
	3	ITB.2.0042.0.P	German as a foreign language or		2	1	0	0	WS/Sose	
Min. 3 CP and	3	ITB.2.0051.0.P	Intercultural Communication and Competence		1	1	0	0	Sose	Auschner
max. 12 CP	6	ITB.2.0093.0.P	Photovoltaische Systeme		2	1	1	0	Sose	Mertens

Legend: The colour coding only refers to	blue	yellow	Grey	green	red
Department which offers the module	Physics	Chemistry	Electrical Engineering & Computer Science	Mechanical Engineering	Institute of Businnes Administration & Engineering

In the elective module catalogue II, modules of at least 3 credit points must be completed. The modules of the elective module catalogue II which have to be completed are determined by the examination board on the basis of previous knowledge, with the following condition: if proof of sufficient knowledge of German is not given, the module "German as a foreign language" has to be completed, if sufficient knowledge of German exists, the module "Intercultural Communication and Competence" has to be completed. Arbitrary Module: Any module supplied by one of the master programs at the University of Applied Sciences Münster can be selected if it is related to the field of materials science. This is decided by the examination board. The student must apply for admission of the respective module at the examination board of the master Material Sciences and Engineering.