

Curriculum MSc "Advanced Materials": Focus Nanomaterials + Focus Biomaterials

Examination Regulations 2015

Semester	Focus	Fundamentals Natural Sciences / Engineering Science				Soft Skills	CP		
1	Nano + Bio	Mathematics (5 CP)				German Language Training German Language Training I (3 CP)	30	30	
		Physics Physics I (5 CP)	Chemistry Physical Chemistry (4 CP)	Materials and Engineering Science Materials Sci. I (5 CP) Electrical Eng. (4 CP)	Biology Biology I (4 CP)				
Advanced Courses Natural Science / Engineering Science / Medical Engineering									
2	Nano	Lab Physics (5 CP)	Materials Chemistry: (4 CP)	Lab Mat. Sci. I (5 CP)		German Language Training II (3 CP)	Nano 27	60	
		Physics II (5 CP)		Materials Sci. II (5 CP) (5 CP) Comp. Semiconductors					
	Bio	Lab Physics (5 CP)	Materials Chemistry: (4 CP)	Biomaterials in Medicine I (5 CP)	Advanced Biology (10 CP) Biology II (5 CP) Lab Biomolecules/ Biophysics (5 CP)	German Language Training II (3 CP)			Bio 27
		Scientific Method Training (3 CP)							
Specialization									
3	Nano	Physics	Chemistry of Nanomaterials	Materials and Engineering Science		German Language Training III (2 CP)	Nano 30	90	
		2 Packages (at 14 CP each) out of 3 subject areas Package: Advanced lab (8 CP), advanced lectures (1 x 6 CP or 2 x 3 CP)							
3	Bio	Softmatter/Biophysics	Chemistry of Biomaterials	Biomaterials in Medicine		German Language Training III (2 CP)	Bio 30		
		2 Packages (at 14 CP each) out of 3 subject areas Package: Advanced lab (8 CP), advanced lectures (1 x 6 CP or 2 x 3 CP)							
4	Nano + Bio	Master's Thesis (30 CP)					30	120	