

Curriculum Materials Science & Engineering 2022-2023

Legend	Compulsory courses CSE-MSE	Compulsory courses shared	Electives CSE General	
	Deficiency courses	Electives CSE MME	Electives CSE CPE	Broading Electives

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Core modules	AMM Characterization (5 EC, Huijser)	AMM Organic Materials Science (5 EC, Wurm)	AMM Inorganic Materials Science (5EC, Baeumer)	Phase Transformation in Manufacturing (5EC, Bor)
		Statistical Thermo (2.5 EC, de Beer)	AMM Project Organic Materials (5 EC, Hempenius)	
			Surfaces and Thin Layers (5EC, Wormeester)	
	AMM Project Inorg. Materials & Mol. CT (5 EC, ten Elshof)			

Year 2				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Core modules	Internship & Job Orientation Project (20 EC; Folkers)		Final Master Project (40 EC)	

Electives scheduled	Advanced Colloids and Interfaces (5 EC, Wood)	Electrochemistry: fundamentals and techniques (5 EC, Altomare)	Polymer Physics (5 EC, de Beer)	Polymer Synthesis (5 EC, Wurm)
		Advanced Ceramics (5 EC, Pizzoccaro-Zilmay)	Advanced Organic Chemistry (5 EC, Jonkheijm)	X-ray Characterisation for S&T (5 EC, Makhotkin)
		Lab on a chip (5 EC, Eijkel)	Elastomeric Science & Engineering (5 EC, Blume)	
				Electrocatalysis: Materials and Spectroscopy (5 EC; Katsoukis)

2.5 EC Topics		Fabri. of Nanostr. - Bottom-Up (Huskens)	Chemical Process Analysis (Gardeniers)	Chem. of Inorg. Mat. & Nanostr. (ten Elshof)
		Design and simulation of chemical batch processes (Franke)	Physical Organic Chemistry (Wong)	Molecular Modeling (de Beer)
			Electrochemical Engineering (Mul)	

Electives n.s.	Theory of Phase Equilibria (5 EC; van der Hoef)			
	Polymers & Material Science Practice (3 EC; Hempenius)			
	Capita Selecta Research Group (5 EC)			
	Contract Research (5 EC)			

Def.	Workshop Aca. Skills (0,5 EC)	
	Matlab for pre-masters ET (2 EC)	
	Math for Engineers (0 EC, optional)	

Compulsory courses	37,5 EC
Broading Elective	12,5 EC
Free Elective	10 EC
Internship	20 EC
Final Master's Project	40 EC