

Specialisation:

Molecules and Organic Materials

Profile:

Sustainable & Smart Molecules and Materials

Legend	Compulsory Courses Specialization	Profile Courses	Electives	Electives non CSE
	Deficiency Courses			

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Compulsory Courses Specialization	Supramolecular Chemistry (5 EC, Huskens)	Statistical Thermo (2,5 EC, de Beer)	Project Organic Materials (5 EC, Hempenius)	
		Organic Materials & Polymer Science (5 EC, Wurm)		
	Characterization (5 EC, Huijser)			

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Profile Courses	Sustainable Organic Chemistry (2,5 EC Wurm)	Electrochemistry: fundamentals and techniques (5 EC, Altomare)	Advanced Organic Chemistry (5 EC, Jonkheijm)	
			Nanochemistry (2,5 C, Wong)	

Year 1					
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B	
Electives scheduled	Advanced Colloids and Interfaces (5 EC, Wood)	Advanced Molecular Separations (5 EC, de Vos/Schuur)	Polymer Physics (5 EC, de Beer)	Polymer Synthesis (5 EC, Wurm)	
	Advanced Catalysis (5 EC, Lefferts/Mul)	Lab on a chip (5 EC, Berendsen)	Research Project (5 EC; Paez)	Biochemistry (5 EC, Bansal)	
			Elastomer Science & Engineering (5 EC, Blume)		
			Advanced Drug Delivery and Nanomedicine (5 EC, Prakash)	Advanced Ceramics (5 EC, Pizzoccaro-Zilmay)	Electrocatalysis: Materials and Spectroscopy (5 EC; Katsoukis)
			Biomedical Materials Engineering (5 EC, Grijpma/Poot)	Sustainable Nanotechnology (5 EC; Susarrey Arce)	X-ray Characterisation for S&T (5 EC, Makhotkin)
					Inorganic Materials Science (5 EC; Baeumer)

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
2,5 EC Topics	Systems Chemistry (Wong)	Ion Transport in Fluids (Wood e.a.)	Chemical Process Analysis (Susarrey Arce)	Membrane Materials (Lammertink/De Vos/Benes)
		Nano and Surface Chemistry (Nijhuis)	Electrochemical Engineering (Banerjee)	Molecular Modelling (De Beer)
			Advanced Reaction Kinetics (Faria)	Membrane Processes (Lammertink/De Vos/Benes)
			Machine Learning in Chemistry (Franke)	

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
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)			

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Deficiency	Workshop Aca. Skills (0,5 EC)			
	Matlab for PM CSE* (2,5 EC)			
	Math for Engineers (0 EC, optional)			

* Matlab for PM CSE (202400599) replaces Matlab voor pre-masters ET (202001390)