

Specialisation:

## Molecules and Organic Materials

Profile:

## Soft Matter

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

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

Year 1				
Profile Courses	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
	Advanced Colloids and Interfaces (5 EC, Wood)			Soft Matter Physics (5 EC, Vutukuri)

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

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

Year 1					
Electives n.s.	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B	
	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				
Deficiency	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
	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)