

Specialisation:

Molecules and Organic Materials

Profile:

Molecules & Materials for Health

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
	Systems Chemistry (2,5 EC, Wong)	Biotechnology (2,5 EC; Michel)	Smart biomaterials (2,5 EC; Paez)	3D bioprinting (5 EC, Rouwkema)

Year 1				
Electives scheduled	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
	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)
		Lab on a chip (5 EC, Berendsen)	Advanced Organic Chemistry (5 EC, Jonkheijm)	Biochemistry (5 EC, Bansal)
		Advanced Drug Delivery and Nanomedicine (5 EC, Prakash)	Research project (5 EC; Paez)	X-ray Characterisation for S&T (5 EC, Makhotkin)
		Biomedical Materials Engineering (5 EC, Grijpma/Poot)	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
		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)
		Nanochemistry (Wong)	Machine Learning in Chemistry (Franke)	

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)			
	Math for Engineers (0 EC, optional)	Matlab for PM CSE* (2,5 EC)		

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