

2022-2023 Nanomaterials Science Programme

Mandatory (MA)	Nanophotonics (NP - primary elective)	Colloid Science (CS - primary elective)	Catalysis and chemical synthesis (CCS - primary elective)	Secondary elective (SE – secondary elective)	Course name	Credits	Type
					Course code	Course coordinator	Timeslot
Year 1							
Semester 1				Semester 2			
Period 1		Period 2		Period 3		Period 4	
				Introducing the Natural Sciences 0.5 MA GSNS-INTRO R.H.H. Pieters -			
Advanced Catalysis 7.5 CCS SK-MCAT P.E. de Jongh A		Advanced Microscopy 7.5 NP NS-EX423M G.A. Blab A		Synthesis of Catalysts & Energy Mat. 7.5 CCS SK-MSCEM P. Ngene A		Photovoltaic Sol. Energy Ph. and Techn. 7.5 NP GEO4-2513 W.G.J.H.M. van Sark A	
Advanced Spectroscopy 7.5 MA SK-MSPEC C. de Mello-Donaga B		Solids and Surfaces 7.5 NP SK-MSOLS D.A.M. Vanmaekelbergh C		Colloid Science 7.5 CS SK-MCS A.P. Philipse D			
Making Modern Science 7.5 SE BETA-B3MMS F.D.A. Wegener B		Organometallic Chem. & Homog. Cat. 7.5 CCS SK-MOCHC M.E. Moret D		Modelling and simulation 7.5 CS NS-TP432M M. Dijkstra B			
Toy Models 7.5 SE BETA-MTOYM W.K. Kegel D		Nonequil. system & transp. phenomena 7.5 CS SK-MNSTP A. Petoukhov B		Quantum Materials 7.5 CS SK-MQUMA Z. Zanolli B		Advanced Organic Synthesis 7.5 CCS SK-MOSS G.J.P.H. Boons C	
		Atomistic Simulations for Mat. Sc. 7.5 CS SK-MASMS N. Artrith B		Photon physics NP NS-EX418M F.T. Rabouw C			
				Soft condensed matter theory CS NS-TP453M R.H.H.G. van Roij D			
				Dilemmas of the scientist workshop 1 0 MA FI-MHPSDL1 H.M. Huistra -			
				Academic Context 6.5 MA SK-MACCO E.T.C Vogt -			
				Master research chemistry part 1* 15 MA SK-MRES1 E. Mulder -			
				Master research chemistry part 2* 37.5 MA SK-MRES2 E. Mulder -			
Year 2							
				Dilemmas of the scientist 0.5 MA FI-MHPSDL2 H.M. Huistra -			
				Academic Context 6.5 MA SK-MACCO E.T.C Vogt -			
				Master research chemistry part 1 15 MA SK-MRES1 E. Mulder -			
				Master research chemistry part 2 37.5 MA SK-MRES2 E. Mulder -			
				Internship max. 30 SE SK-MINTERN E. Mulder -			

Requirements

67.5 EC mandatory courses, research project and thesis
 22.5 EC primary courses min. 2 in NP/CS/CCS and min. 1 in NP/CS/CCS
 30 EC secondary courses, an internship or GSNS-profile

* The research project can be carried out at 7 research groups of the Debye Institute or the Institute for Sustainable and Circular Chemistry. To do your project at a research group, obligatory courses might be required. These can be found via [this page](#).