

CURRICULUM MASTERS IN NANO TECHNOLOGY 2023-2024

Compulsory courses	Compulsory courses: Internship & MSc assignment	Deficiency courses
(Application of) Solid State Matter	(Bio)Molecular Matter	Nano-engineered Devices

Year 1				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
	Characterisation	Fabrication	Design + Application	Internship
Core modules	Characterization of Nanostructures (7,5EC) 201600043	Fabrication of Nanostructures (7,5EC) 202300199	Design project (10EC) 201600044	Internship & Job Orientation Project (20 EC) 201700174
	Nano-Lab: Fabrication & Characterization (5EC) 201600041			
	Nanoscience* (5EC) 193400050 or Nanophysics* (5EC) 193530010	SOL: Nano-electronics (5EC) 193400141	SOL: AMM Inorganic Materials Science (5EC) 193700040	
		BMM: Advanced Drug Delivery and Nanomedicine (5EC) 202200254	BMM: Bionanotechnology (5EC) 193400111	
		SMS: Lab on a chip (5EC) 201600046	Nano Engineered Devices: Nanofluidics (5EC) 193400121 or Micro Electro Mechanical Systems (MEMS) Design (5EC) 191211300	
Deficiency	Workshop Academic Skills (0,5EC) 201700158	Matlab for pre-masters ET (2,5EC) 202001389		
		A first practical course in Electronics (1,0EC) 201900246		

*Please check Osiris for the course descriptions. If you would like to do Nanophysics instead of Nanoscience based on your prior experiences, please contact the study advisor first.

Year 2				
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
	Nano-research	Master's Final Project preparation, evaluation		
Core modules	Continuation Internship		Societal Embedding	
	SOL: Nanomaterial research (5EC) 201900042 or Nano-optics (5EC) 193400131	Master's Final Project (40EC) 202200257 including Societal embedding (3rd quarter) 202001556		
	BMM: (Bio)molecular Chemistry & Technology (5EC) 193700020			
	SMS: Adv. Colloids & Interfaces (5EC) 201800083 or FEM theory and COMSOL simulations for micro- and Nanodevices (5EC) 202200253			
	Elective (5EC)	1 Elective or C.S. research group in quarter 2, 3 or 4 (subjects from 1st year are also allowed)		

	Electives			
	Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
Electives	Quantum information, Renema (5EC) 202100078	Theoretical solid state Physics (5EC) 193510040	Surfaces and thin layers (5EC) 193550020	Chem. of inorg. Mat. and nanostructures (2,5EC) 201900122
	Biophysical techniques & molecular imaging (5EC) 193640020	Quantum optics (5EC) 202100083	Nanophotonics (5EC) 201100074	Modern topics in condensed matter physics (5EC) 201500167
	Transducer science (5EC) 201400427	AMM Organic Materials Science (5EC) 193700030	Biomedical Signal Acquisition (5EC) 191210720	Electrocatalysis: Materials and Spectroscopy (5EC) 202200313
	Systems-on-chip for embedded systems (5EC) 191211590	Emstatics (5EC) 191211690	Design Principles for Precision Mechanisms 2 (5EC) 191131360	
			Sustainable Nanotechnology (5EC) 202200330	
Electives n.s.	Macromolecular Nanotechnology (5EC) 193730070, Vancso			
	Advanced semiconductor devices (5EC) 201900135, Salm			