

MPhys with Nanotechnology - Programme Structure

Part 1									
Semester 1					Semester 2				
		ECTS	FHEQ			ECTS	FHEQ		
PHYS1015	†	5	4	Motion and relativity	PHYS1011	†	5	4	Waves, light & quanta
PHYS1017	†	5	4	Physics Skills 1	PHYS1013	†	5	4	Energy & matter
PHYS1022	†	5	4	Electricity and Magnetism	PHYS1019	†	5	4	Physics Skills 2
MATH1006	†	7.5	4	Introduction to Mathematical Methods	MATH1007	†	7.5	4	Mathematical Methods for Physical Science
PHYS1004	†	7.5	4	Introduction to Photonics	PHYS1201	†	7.5	4	Physics Skills - Programming and Data

Part 2									
Semester 1					Semester 2				
		ECTS	FHEQ			ECTS	FHEQ		
PHYS2006	†	7.5	5	Classical Mechanics	PHYS2001	†	7.5	5	Electromagnetism
PHYS2022	†	7.5	5	Physics from Evidence 1	PHYS2003	†	7.5	5	Quantum Physics
PHYS2023	†	7.5	5	Wave Physics	PHYS2024	†	7.5	5	Statistical Mechanics
BIOL1010	†	7.5	5	Molecular Basis of Life	PHYS2026	†	7.5	4	Introduction to the Nano World

Part 3									
Semester 1					Semester 2				
		ECTS	FHEQ			ECTS	FHEQ		
PHYS3007	†	7.5	6	Theories of Matter, Space and Time	PHYS3002	†	7.5	6	Nuclei & Particles
PHYS3008	†	7.5	6	Atomic Physics	PHYS3004	†	7.5	6	Crystalline Solids
PHYS6009	†	7.5	7	Dissertation	PHYS6008 or	‡	7.5	7	Physics from Evidence 2
PHYS3003	†	7.5	6	Light and Matter	PHYS6017	‡	7.5	7	Computer Techniques
					OPTION	7.5	5/6/7	1	Option module

Part 4									
Semester 1					Semester 2				
		ECTS	FHEQ			ECTS	FHEQ		
PHYS6006	†	15	7	MPhys Project (continues through semester 2)					
PHYS6003	‡	7.5	7	Advanced Quantum Physics	PHYS6015	‡	7.5	7	MPhys Synoptic Exam
PHYS6012	‡	7.5	7	Coherent Light, Coherent Matter	PHYS6014	‡	7.5	7	Nanotechnology and Advanced Materials
OPTION		7.5	6/7	1 option module	OPTION	7.5	6/7	1	option module

FHEQ levels for options are illustrative, other configurations are possible, but must meet university regulations on forward/back-tracking, and final ECTS accumulation for award (<http://www.calendar.soton.ac.uk/sectionIV/cats.html>)

Status † Core module - must be taken and passed before progression to next level or award
‡ Compulsory module - must be taken before progression to next level or award