Chemical Nanoengineering – Scheme of studies

	Semester 1	Semester 2	Semester 3	Semester 4
Lecture modules	Marseille	Wroclaw	Rome	
	(Nano-Chemistry)	(Nano-Engineering)	(Nano-Applications)	
1	Nano-Electrochemistry (3 ECTS)			
	Solid State Chemistry and Nano-materials (7 ECTS)	Structure and Crystallography of Solids (3 ECTS)	Characterization of Nano-Engineering Systems (6 ECTS)	
	Organic Chemistry of Nano-materials (3 ECTS)		NMR of Nanosystems (2 ECTS) (Option A: Chemistry)	
		Synthesis and Fabrication of Nano-engineering Systems (3 ECTS)	Nanoscale Synthesis Methods (5 ECTS)	
2		Fabrication of Smart Polymers (3 ECTS)	Macromolecular and Supramolecular Chemistry (5 ECTS)	
3		Engineering of Nano-machines (2 ECTS)	Structural and Functional Properties of Biopolymers (3 ECTS) (option A: Chemistry)	Master Thesis
		Bio-photonics (2 ECTS) Biomaterials-Biomedical Devices (3 ECTS)	Nanoscale Energy Technology, Nano-sensors and Micro-fluidics (5 ECTS)	
	Basic Quantum Chemistry Modeling (3 ECTS)		Nanoscale Structural transformations and Kinetics (2 ECTS) (option B: Modeling)	
4	Computational Modeling of Nano-Systems (7 ECTS)	Nanostructures in Industrial and Numerical Applications (5 ECTS)	Probability and Statistical Methods for Modelling Engineers (3 ECTS) (Option B: Modeling)	
	Thermodynamics of Materials- Interactions and Surface Forces (3 ECTS)			
5	Nano-engineering Seminar + Project (2 ECTS)	Nano-engineering Seminar + Project (2 ECTS)	Nano-engineering Seminar + Project (2 ECTS)	
6	Language (2 ECTS)	Language (2 ECTS)	Language (2 ECTS)	
7		Economics and Management (5 ECTS)		
	Semester 1	Semester 2	Semester 3	Semester 4

Mobility scheme

YEAR 1		SUMMER	YEAR 2	
Marseille (30 ECTS)	Wroclaw (30 ECTS)	Summer Workshop Internships	Rome (30 ECTS)	Master Thesis (30 ECTS)