

Teaching plan - PhD programme in Materials Science and Nanotechnologies

36° Cycle

Course	SSD	hrs	credits	Educational form*	Type of activity**	Mandatory/ Chosen activity
2D materials beyond graphene: from fundamentals to energy applications	FIS/03	16	2	lecture	curricular	Chosen activity
Principles and applications of nanobiotechnologies	BIO/12	8	1	lecture	curricular	Chosen activity
Epitaxial semiconductor nanostructures for optoelectronic and electrochemical devices	FIS/03 CHIM/02	16	2	lecture	curricular	Chosen activity
Atomic Layer Deposition: processes, methods, new developments, and applications for energy	CHIM/04 CHIM/06 CHIM/02	16	2	lecture	curricular	Chosen activity
Structure-property relationships in porous crystalline materials for gas storage	CHIM/04 CHIM/03 CHIM/02 CHIM/06	16	2	lecture	curricular	Chosen activity
PCAM School (subject to be defined)	FIS/03 CHIM/03	24	2	seminars	curricular	Chosen activity
Seminars on Materials Science	FIS/03, FIS/01, CHIM/03,CHIM/02, CHIM/04,CHIM/06, BIO/12	24	2	seminars	curricular	Chosen activity
Advanced computational methods for materials science	FIS/03	8	1	lecture	curricular	Chosen activity
Semiconductor trip: from a simple idea to a complex manufacturing	FIS/03, FIS/01	16	2	lecture	cross-curricular	Chosen activity
New lignin-based sustainable materials: science and technological aspects.	FIS/03, FIS/01, CHIM/03, CHIM/04, CHIM/06	8	1	lecture	cross-curricular	Chosen activity
Total hrs/credits		152	17			

Educational form*

lecture
laboratory training
seminar

Type of activity**

curricular
cross-curricular