

Program Name: Materials physics

Program Description:

This Master will allow students currently at the end of the license cycle to continue their training in the second course of the LMD system. The objective of this master's is to prepare a Master's thesis in Materials Science and to provide high-level general training in order to facilitate students' professional integration or the pursuit of research studies after obtaining the Master's degree. This Master is organized in two years: the first year is training in the chosen option while the second year is more specialized training. The option of this Master will allow students holding the LMD "Material Sciences" license to access work in the fields of phase transformations of materials and the development and characterization of materials using the different analytical techniques.

Semester 1	
Teaching unit	
fundamental teaching units	Radiation matter interaction
	Phase transformations
	Semiconductor physics
	Physical properties of materials
Methodology TU	Practical work 1
	Simulation methods in materials science
transverse TU	english 1
Discovery TU	Management
Semester 2	
Teaching unit	
fundamental teaching units	Elaboration of thin layers and experimental techniques
	Methods of analysis and characterization of materials I
	Materials technology
	Quantum mechanics
Methodology TU	Practical work 2
	Microscopy
transverse TU	English 2
Discovery TU	Nanotechnology 1

Semester 3 Teaching unit	
fundamental teaching units	Physics of defects
	Thermodynamics and statistical physics
	Methods of analysis and characterization of materials II
Methodology TU	Applied numerical methods
	Scientific and didactic processes
transverse TU	Englis 3
Discovery TU	Nanotechnology 2
Semester 4 Teaching unit	Internship in a company sanctioned by a master dissertation