

Program Name: fundamental chemistry

Program Description:

The training offered is an academic license which aims to give students a general scientific training and a more theoretical specialization while giving a global vision of other disciplines. The training offers the student the possibility of pursuing master's studies in a very broad spectrum of specialties in the same field of material sciences.

Semester 1	
Teaching unit	
fundamental teaching units	Mathematics 1
	Physics 1
	Chemistry 1
Methodology TU	PW Mechanic 1
	PW chemistry 1
	Informatics 1
transverse TU	english 1
Discovery TU	Environment
Semester 2	
Teaching unit	
fundamental teaching units	Mathematics 2
	Physics
	Chemistry 2
Methodology TU	PW of Electricity
	PW chemistry 1
	Informatics 2

transverse TU	english 2
Discovery TU	Renewable Energies
Semester 3	
Teaching unit	
fundamental teaching units	Mineral Chemistry
	Organic Chemistry 1
	Applied mathematics
	Vibrations, Waves and Optics
Methodology TU	PW Mineral Chemistry
	PW Organic Chemistry 1
	numerical methods and programming
transverse TU	English 3
Discovery TU	Physico-chemical analysis techniques I
Semester 4	
Teaching unit	
fundamental teaching units	Organic Chemistry 2
	Thermodynamics and chemical kinetic
	Analytical Chemistry
	Quantum chemistry
Methodology TU	PW Analytical Chemistry
	PW Thermodynamics and chemical kinetic
	Inorganic chemistry

transverse TU	English 4
Discovery TU	Physico-chemical analysis techniques 2
Semester 5	
Teaching unit	
fundamental teaching units	Organic chemistry III
	Analytic chemistry II
	Crystallography
	Quantum chemistry II
Methodology TU	PW Organic synthesis
	PW molecular modeling
transverse TU	Scientific English
Discovery TU	Materials chemistry
Semester 6	
Teaching unit	
fundamental teaching units	Thermodynamics of solutions
	Electrochemistry
	Molecular spectroscopy
	Surface chemistry and catalysis
Methodology TU	PW surface chemistry
	PW Physical analysis methods
transverse TU	Scientific English II
Discovery TU	Ethics and deontology