

Program Name: Fundamental physics

Program Description:

It is an original training course lasting three years during which students deepen a high level knowledge in Physics. The teaching units chosen allow the student to enter the world of research by preparing a master's degree (possibly a doctorate) in different specialties of physics, to continue his studies in the higher normal schools for a professional career. in the teaching of physics or to move towards the disciplines of engineering 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	Differential series and equations
	Analytical mechanics
	Vibrations and waves
	Geometric and physical optics
Methodology TU	PW Vibrations and waves
	PW Geometric and physical optics
	numerical methods and programming
transverse TU	English 3
Discovery TU	Physical crystallography
Semester 4 Teaching unit	
fundamental teaching units	Thermodynamics
	Function of the complex variable
	Quantum mechanics
	Electromagnetism
Methodology TU	PW Thermodynamics
	Fluid mechanics
	General electronics
transverse TU	Englihs 4
Discovery TU	Atomic and nuclear physics

Semester 5 Teaching unit	
fundamental teaching units	Quantum Mechanics II
	Mathematical Methods for Physics
	Relativity
	Statistical Physics
Methodology TU	Electromagnetic waves
	Physics of Semiconductors
	numerical Physics
transverse TU	Scientific English1
Discovery TU	Semiconductor physics
Semester 6 Teaching unit	
fundamental teaching units	Solid State Physics
	Nuclear physics
	Atomic Physics
	Heat transfer
Methodology TU	PW Nuclear physics
	PW Atomic Physics
	Physical Optics
transverse TU	Scientific English 2
Discovery TU	Particle physics