

## Program Name: Pharmaceutical chemistry

### Program Description:

The chemistry license that we offer allows students to acquire theoretical and practical knowledge in general, analytical and organic chemistry and in particular in pharmaceutical chemistry (galenic pharmacy and industrial processes). It also makes it possible to dominate the essential methods of physico-chemical analysis. This license will allow the student to be suitably prepared to pursue studies in a specialized master's degree and then in a doctorate. It also allows him to convert into a professional activity in pharmaceutical chemistry.

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

<b>Semester 3</b>	
<b>Teaching unit</b>	
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
<b>Semester 4</b>	
<b>Teaching unit</b>	
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

<b>Semester 5</b>	
<b>Teaching unit</b>	
fundamental teaching units	Spectroscopic analysis methods
	Advanced Organic Chemistry I
	Pharmaceutical organic chemistry
	Electrochemical analysis methods
Methodology TU	Pharmacology-Toxicology
	PW Synthesis of organic intermediates for bioactive molecules
transverse TU	English language 5
Discovery TU	Initiation to the knowledge of the drug
<b>Semester 6</b>	
<b>Teaching unit</b>	
fundamental teaching units	Chromatographic methods of separation
	Quantitative analysis methods
	Advanced Organic Chemistry II
	Molecular Modeling
	Structural biochemistry
Methodology TU	Galenic pharmacy
	PW separation methods applied to pharmaceuticals
transverse TU	Ethics and University Deontology
Discovery TU	Good Manufacturing Practices and Good Laboratory Practices