

**LM-13 - PHARMACEUTICAL CHEMISTRY AND TECHNOLOGIES**  
**LM-13 – CHIMICA E TECNOLOGIE FARMACEUTICHE**

**EDUCATIONAL PROGRAMME**

<b>1<sup>st</sup> YEAR</b>	<b>credits</b>
General and Inorganic Chemistry	8
Mathematics and Physics – integrated course	
- Physics	8
- Mathematics	8
Animal Biology and Vegetal Biology	8
Computing Skills	4
Human Anatomy	6
Pharmacology and Pharmacognosis	6
General Microbiology	6
<b>2<sup>nd</sup> YEAR</b>	<b>credits</b>
Pharmaceutical Analysis of Drugs	10
Biochemistry	10
Organic Chemistry	10
Molecular Biology	6
Analytical Chemistry	8
Physical Chemistry	8
Physical Methods in Organic Chemistry	8
<b>3<sup>rd</sup> YEAR</b>	<b>credits</b>
Food chemistry	8
Pharmaceutical and Toxicological Chemistry I	8
General Physiology and Pathology (medical Terminology) – integrated course	
- General Physiology	8
- Pathology (medical Terminology)	6
Analysis of Drugs	10
Pharmacology and Pharmacotherapy	8
Pharmacological Technology, Socioeconomics and Regulations and Technology of Pharmaceutical Types – integrated course	
- Pharmacological Technology, Socioeconomics and Regulations	6
- Technology of Pharmaceutical Types	6
<b>4<sup>th</sup> YEAR</b>	<b>credits</b>
Applied Pharmaceutical Chemistry	8
Pharmaceutical and Toxicological Chemistry II	8
Special Methodologies in Pharmaceutical Analysis	10
Pharmacology and Toxicology	6
Group of Optional Activities	18
(suggested) Elective activities	12
<b>5<sup>th</sup> YEAR</b>	<b>credits</b>
English Language	6
Experimental Dissertation	28
Professional Practice	30

<b>Group of optional educational activities</b>	<b>credits</b>
Applied Biochemistry	6
Pharmaceutical Biotechnologies	6
Advanced Pharmaceutical Chemistry and Drug Design – integrated course	
- Advanced Pharmaceutical Chemistry	6
- Drug Design	6

Advanced Pharmaceutical Chemistry and Pharmaceutical Industrial Plants – integrated course	
- Advanced Pharmaceutical Chemistry	6
- Pharmaceutical Industrial Plants	6

<b>(suggested) Elective activities</b>	<b>credits</b>
Advanced Methodologies in Pharmaceutical Chemistry	6
Drug Vehiculation and Targeting	6
Structure and Function of Proteins	6
Advanced Organic Chemistry	
Drug Surveillance and Pharmacoeconomics	