

MSc. of Physical Chemistry / Chemical Engineering ChemoInformatics specialisation

Year One

Fall Semester

Phys Chem 1

ECTS 12

Kinetics and Thermodynamics

Analytical and physical chemistry, Practical courses

Optical spectroscopies

Separation methods and mass spectrometry

Chem Eng 1

ECTS 9

Polymer chemistry

Petrochemistry

Membrane separation

Info 1

ECTS 9

Project-mode applied programming in Python

Introduction to Data Science

Year One

Spring Semester

Phys Chem 2

ECTS 9

Inorganic analysis and speciation

Electrochemistry

NMR Spectroscopy

Chem Eng 2

ECTS 6

Advanced transfers

Polymer Reaction Engineering

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Info 2

ECTS 6

Chemical databases and Chemoinformatics
Molecular Modeling + Quantum Chemistry

5 week Internship

ECTS 9

Internship 5 weeks

Year Two

Fall Semester

Chemoinformatics

ECTS 9

Chemoinformatics 1
Chemoinformatics 2
Chemoinformatics 3

Technology and applications

ECTS 12

Data mining
Internet technologies
Découverte de médicaments
Structure-based computer assisted drug design

Modelling

ECTS 9

Structural biology and molecular modelling
Molecular dynamics simulation
Advanced quantum chemistry

Year Two

Spring Semester

Research or Engineer Internship

ECTS 30

Research or Engineer Internship