



MASTER - Chimie

Chemoinformatics (UFAZ)

Langue du parcours	Français		
ECTS	ECTS		
Volume horaire			
TP : 0h	TD : 0h	CI : 0h	CM : 0h
Formation initiale	Oui		
Formation continue	Non		
Apprentissage	Non		
Contrat de professionnalisation	Non		

M1 Physical Chemistry and Chemical Engineering

M1S1 Physical Chemistry and Chemical Engineering

	ECTS	CM	CI	TD	TP	TE	Stage
Phys Chem 1	12 ECTS		63 h		30 h	9 h	
Kinetics and Thermodynamics			21 h			3 h	
Analytical and physical chemistry, Pratical courses					30 h		
Optical spectroscopies			21 h			3 h	
Separation methods and mass spectrometry			21 h			3 h	
Chem Eng 1	9 ECTS		63 h			9 h	
Polymer chemistry			21 h			3 h	
Petrochemistry			21 h			3 h	
Membrane separation			21 h			3 h	
Info1	9 ECTS	21 h		18 h	18 h	85.5 h	
Project-mode applied programming in Python		12 h		9 h	9 h	45 h	
Introduction to Data Science		9 h		9 h	9 h	40.5 h	

M1S2 Physical Chemistry and Chemical Engineering

	ECTS	CM	CI	TD	TP	TE	Stage
Phys Chem 2	9 ECTS		84 h			12 h	
Inorganic analysis and speciation			21 h			3 h	
Electrochemistry			21 h			3 h	
NMR Spectroscopy			21 h			3 h	
Chem Eng 2	6 ECTS		42 h			6 h	
Advanced transfers			21 h			3 h	
Polymer Reaction Engineering			21 h			3 h	
Info 2	6 ECTS	12 h	18 h	9 h	15 h	45 h	
Chemical databases and Chemoinformatics			21 h				
Molecular Modeling + Quantum Chemistry			18 h		6 h		
5 week Internship	9 ECTS						
Internship 5 weeks							

M2 Chemoinformatics

M2S3 Chemoinformatics

	ECTS	CM	CI	TD	TP	TE	Stage
Chemoinformatics	9 ECTS		48 h	32 h			
Chemoinformatics 1		16 h		8 h			
Chemoinformatics 2		16 h		8 h			
Chemoinformatics 3		16 h		8 h			
Technology and applications	12 ECTS	10 h	64 h	9 h	13 h		
Data mining			24 h				
Internet technologies			30 h				
Découverte de médicaments			20 h	8 h			
Structure-based computer assisted drug design		10 h		1 h	13 h		
Modelling	9 ECTS	32 h	24 h	16 h	8 h		
Structural biology and molecular modelling		16 h		8 h			
Molecular dynamics simulation			24 h				
Advanced quantum chemistry		16 h		8 h	8 h		

M2S4 Chemoinformatics

	ECTS	CM	CI	TD	TP	TE	Stage
Research or Engineer Internship	30 ECTS						
Research or Engineer Internship							18 sem