



MASTER - Chimie

Chemical Engineering (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 Chemical Engineering

M2S3 Chemical Engineering

	ECTS	CM	CI	TD	TP	TE	Stage
Chem Eng 3	12 ECTS		63 h		30 h		
Energy / Biomass			21 h				
Chemical engineering Practical Work					30 h		
Process intensification			21 h				
Environmental waste water treatment			21 h				
Chem Eng 4	9 ECTS		63 h				
Process systems engineering			21 h				
Catalytic reactor engineering			21 h				
Engineering rheology			21 h				
Chem Eng 5	9 ECTS		63 h				
Chemical process control			21 h				
Process simulation			21 h				
Industrial lectures			21 h				

M2S4 Chemical Engineering

	ECTS	CM	CI	TD	TP	TE	Stage
1-6 month Research Internship	30 ECTS	9 h		9 h	304 h	483 h	18 sem
In Industry or lab, centered on CE	30 ECTS						18 sem