



# Licence Chimie

## Chemistry (UFAZ) (délocalisé en Azerbaïdjan)

### Présentation

La licence mention Chimie permet l'acquisition des bases en chimie organique, chimie inorganique, chimie physique et analytique ainsi que de solides aptitudes aux techniques expérimentales. L'utilisation de méthodes pédagogiques innovantes basées sur des projets tuteurés, des enseignements dits d'ouverture et une part importante de travaux pratiques permettent à l'étudiant d'acquérir une grande autonomie dans ses apprentissages (apprendre en faisant). Des stages en milieu professionnel et en laboratoire de recherche occupent aussi une large part dans la formation. Un accent particulier est mis sur l'enseignement de l'anglais disciplinaire, indispensable à tout scientifique.

### Objectifs

Ce parcours est proposé exclusivement dans le cadre de l'UFAZ ([Université franco-azerbaïdjanaise](#)) et est entièrement délocalisé à Bakou.

The goal is first to teach fundamental science (Mathematics, Physics, Chemistry), and then to insure a high level of training in Physical and Analytical Chemistry in theory but also for practical applications (lab work).

The purpose is to form very good student that can work in public or private chemistry lab or continue their studies in Master of Physical or Analytical chemistry, to finally work as teachers, and(or)researcher, in private or public chemical laboratories or industry.

### Insertion professionnelle

After the diploma students can work as high-level bachelor's in public or private chemistry lab, and will be well prepared to teach. Continue studies in Master's in physical-Chemistry or Analytical-Chemistry in UFAZ or abroad.

Composante	<ul style="list-style-type: none"> <li><a href="#">Faculté de chimie</a></li> </ul>
Langues d'enseignement	<ul style="list-style-type: none"> <li>Anglais</li> </ul>
Durée	4 ans
Formation à distance	Non, uniquement en présentiel
Régime d'études	<ul style="list-style-type: none"> <li>FI (Formation initiale)</li> </ul>
Niveau RNCP	Niveau 6
RNCP	<ul style="list-style-type: none"> <li><a href="#">RNCP38701 : Licence Chimie</a></li> </ul>
Lieu	Bakou - Azerbaïdjan
Campus	<ul style="list-style-type: none"> <li>Campus Bakou</li> </ul>
Formation internationale	Formation ayant des partenariats formalisés à l'international
Lieu(x) à l'étranger	Bakou - Azerbaïdjan
Stage	Non
Alternance	Non

### Contacts

#### Responsable(s) de parcours

- [Philippe Bertani](#)

# Programme des enseignements

## Chemistry (UFAZ) (délocalisé en Azerbaïdjan)

### Licence Chimie - Chemistry (UFAZ) - L0

Semester 01					
		CM	TD	TP	CI
Basic Mathematics 1	6 ECTS	1,5h	4,5h	-	42h
Basic Maths 1		-	-	-	42h
Working Methodology - Basic Maths 1		1,5h	4,5h	-	-
Basic Physics 1	6 ECTS	3h	3h	-	39h
Basic Physics 1		-	-	-	39h
Working Methodology - Basic Physics 1		3h	3h	-	-
Basic Chemistry 1	6 ECTS	3h	3h	-	42h
Basic Chemistry 1		-	-	-	42h
Working Methodology - Basic Chemistry 1		3h	3h	-	-
Introduction to Computer Science 1	6 ECTS	-	6h	21h	33h
System, Algorithms and Programming 1		-	-	21h	33h
Working Methodology - Intro to Computer Sciences 1		-	6h	-	-
Languages 01	6 ECTS	-	60h	-	-
English or French		-	60h	-	-

Semester 02					
		CM	TD	TP	CI
Basic Mathematics 2	7 ECTS	20h	60h	-	-
Algebra, Probability, Statistics		10h	30h	-	-
Analysis		10h	30h	-	-
Basic Physics 2	6 ECTS	13,5h	-	21h	25,5h
Basic Physics 2		13,5h	-	21h	25,5h
Basic Chemistry 2	6 ECTS	13,5h	-	21h	27h
Basic Chemistry 2		13,5h	-	21h	27h
Introduction to Computer Sciences 2	6 ECTS	-	24h	21h	15h
Systems, Algorithms and Programming 2		-	24h	21h	15h
Languages 02	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Basic Geosciences	2 ECTS	13,5h	7,5h	3h	-
Introduction to Geosciences		12h	3h	3h	-
Working Methodology		1,5h	4,5h	-	-

Semester 1					
		CM	TD	TP	CI
Chemical Engineering 1	4 ECTS	-	-	15h	21h
Introduction to Chemical Engineering		-	-	-	21h
Chemical. Engineering. Lab 1 (Physics)		-	-	15h	-
Language 1	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Mathematics 1	6 ECTS	28h	28h	-	-
Mathematics 1		28h	28h	-	-
Computer Science 1	3 ECTS	9h	-	21h	-
Computer Science for Physics and Chemistry		9h	-	21h	-
Chemistry 1	6 ECTS	24h	24h	21h	-
Architecture of Matter 1		12h	12h	-	-
Transformation of Matter 1		12h	12h	-	-
Chemistry Lab 1		-	-	21h	-
Physics 1	8 ECTS	42h	42h	-	-
Point Mechanics		12h	12h	-	-
Fluid Mechanics		6h	6h	-	-
Thermodynamics 1		12h	12h	-	-
Electrostatics		12h	12h	-	-

Semester 2					
		CM	TD	TP	CI
Mathematics 2	6 ECTS	28h	28h	-	-
Mathematics 2		28h	28h	-	-
Physics 2	6 ECTS	18h	18h	36h	-
Oscillators, Waves, Optics		18h	18h	-	-
Physics Lab 1		-	-	36h	-
Chemistry 2	9 ECTS	30h	30h	30h	-
Architecture of Matter 2		15h	15h	-	-
Transformation of Matter 2		15h	15h	-	-
Chemistry Lab 2		-	-	30h	-
Chemical Engineering 2	6 ECTS	-	-	-	57h
Heat Transfer		-	-	-	21h
Process Diagram		-	-	-	15h
Material Science for Chemical Engineering		-	-	-	21h

		CM	TD	TP	CI
Language 2	3 ECTS	-	30h	-	-
English or French		-	30h	-	-

### Licence Chimie - Chemistry (UFAZ) - L2 (ouverture en 2026-2027)

Semester 3					
		CM	TD	TP	CI
Mathematics 3	5 ECTS	20h	34h	-	-
Mathematics 3		20h	34h	-	-
Chemistry 3	9 ECTS	30h	30h	36h	-
Reactivity 1 (Industrial Chem)		15h	15h	-	-
Thermodynamics and Kinetics		15h	15h	-	-
Chemistry Lab 3		-	-	36h	-
Language 3	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Physics 3	5 ECTS	25,5h	25,5h	-	-
Electricity for CS and CE		13,5h	13,5h	-	-
Thermodynamics 2		12h	12h	-	-
Physical and Molecular Chemistry 1	8 ECTS	-	-	20h	63h
Scientific Instrumentation Signal and Data Processing		-	-	20h	21h
Molecular Dynamics / Cheminfo		-	-	-	21h

Semester 4					
		CM	TD	TP	CI
Mathematics 4	5 ECTS	20h	32h	-	-
Mathematics 4		20h	32h	-	-
Physics 4	3 ECTS	12h	18h	-	-
Fluid Mechanics 2		12h	18h	-	-
Language 4	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Physical Chemistry 2	7 ECTS	-	-	36h	42h
Quantum Chemistry		-	-	-	21h
Chemical Bond and Spectroscopy Symetry		-	-	-	21h
Chem Lab 5		-	-	36h	-
Chemistry 4	9 ECTS	30h	30h	36h	-
Reactivity 2 (Inorganic)		15h	15h	-	-
Spectroscopies and Electrochemistry		15h	15h	-	-

		CM	TD	TP	CI
Chemistry Lab 4		-	-	36h	-
Professional Preparation 1	3 ECTS	-	30h	-	-
Soft Skills		-	30h	-	-

### Licence Chimie - Chemistry (UFAZ) - L3 (ouverture en 2027-2028)

Semester 5					
		CM	TD	TP	CI
Mathematics 5	3 ECTS	-	-	-	30h
Ordinary and Partial Differential Equations		-	-	-	30h
Physical Chemistry	11 ECTS	-	-	30h	75h
Spectroscopy		-	-	-	-
Catalysis and Environment		-	-	-	-
Molecular Chemistry 2		-	-	-	-
Chem Project		-	-	-	-
Phys Chem Lab		-	-	-	-
Physical Chemistry 5	10 ECTS	-	-	30h	69h
Polymers and Formulation		-	-	-	24h
Analytical Chemistry		-	-	-	24h
Experimental Chemistry 5		-	-	30h	-
Applied Chemistry		-	-	-	21h
Language 5	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Professional Preparation 2	3 ECTS	-	36h	-	-
Scientific Writing		-	36h	-	-

Semester 6					
		CM	TD	TP	CI
Chemistry 6	3 ECTS	3h	-	27h	-
Chemistry Project		3h	-	27h	-
Physical Chemistry 3	9 ECTS	-	12h	-	42h
Analytical Chemistry 2		-	-	30h	21h
Electrochemistry 2		-	12h	-	21h
Internship	15 ECTS	-	-	-	-
Internship (8 weeks)		4,5h	-	-	-
Professional Preparation 3	3 ECTS	-	30h	-	-
Management and Entrepreneurship		-	30h	-	-