Université de Strasbourg

Sciences, Technologies, Santé | 2026-2027

DIPLÔME NATIONAL DE LICENCE CONTRÔLÉ PAR L'ÉTAT

Licence Chimie
Chemical engineering (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-azerbaidjanaise) et est entièrement délocalisé à Bakou.

The diploma of Bachelor in Chemical Engineering aims to ensure a high-level training adapted to the challenges and evolutions in the chemical industries. By gradually introducing basic skills, the study program teaches students fundamental scientific knowledge (mathematics, chemistry, physics), as well as how to use this knowledge in various areas related to the chemistry and chemical engineering (conception, scaling of processes for production, analytical chemistry, quality control), while ensuring security rules of processes and environmental quality.

Such training plays a twofold role by providing theoretical and practical knowledge, as well as working methods to analyze, synthesize scientific and/or bibliographic data. The program provides also knowledge and skills on the environment and the company's culture.

Critères de recrutement

The application process takes place entirely in Baku.

The UFAZ entrance assessment comprises multiple-choice questions covering various subjects:

* Physics (10 questions)

* Chemistry (10 questions)

* Mathematics (10 questions)

* General scientific knowledge (10 questions)

* English language

Admission ranking to UFAZ is based only on the UFAZ exam results (SEC results are not taken into account for the ranking). These results are released by UFAZ's specialized committee, overseen by experts from Strasbourg and Rennes 1 Universities.

Prérequis obligatoires

Requirements for students in this specialty include:

* Having strong skills in maths, physics and chemistry;

* Having strong language skills (specifically in English);

* Being hard-working;

Composante	• Faculté de chimie
Langues d'enseignement	• Anglais
Durée	4 ans
Formation à distance	Non, uniquement en présentiel
Régime d'études	• FI (Formation initiale)
Niveau RNCP	Niveau 6
RNCP	• RNCP38701 : Licence Chimie
Lieu	Bakou - Azerbaijan
Campus	• Campus Bakou
Formation internationale	Formation ayant des partenariats formalisés à l'international
Lieu(x) à l'étranger	Bakou - Azerbaïdjan
Secteurs d'activité	• Autres activités spécialisées, scientifiques et techniques
Stage	Non
Alternance	Non

Contacts

Responsable(s) de parcours

- Sylvie Choua
- Aline Maisse-Francois

Autres contacts

UFAZ Education Department

* A dedicated approach to learning.

* Adaptability to varying situations.

Programme des enseignements

Chemical engineering (UFAZ) (délocalisé en Azerbaïdjan)

Licence Chimie - Chemical engineering (UFAZ) - L0

Semester 01

		CM	TD	TP	CI
Basic Mathematics	6 ECTS	1,5h	4,5h	-	42h
Basic Mathematics		-	-	-	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	-	-
Calculus I		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
Mathematics 1	6 ECTS	28h	28h	-	-
Calculus II		28h	28h	-	-
Physics 1	8 ECTS	42h	42h	-	-
Point Mechanics		12h	12h	-	-
Fluid Mechanics		6h	6h	-	-
Thermodynamics 1		12h	12h	-	-
Electrostatics		12h	12h	-	-
Chemistry 1	6 ECTS	24h	24h	21h	-
Architecture of Matter 1		12h	12h	-	-
Transformation of Matter 1		12h	12h	-	-
Chemistry Lab 1		-	-	21h	-
Chemical Engineering 1	4 ECTS	-	-	15h	21h
Introduction to Chemical Engineering		-	-	-	21h
Chemical. Engineering. Lab 1 (Physics)		-	-	15h	-
Computer Science 1	3 ECTS	9h	-	21h	-
Computer Science for Physics and Chemistry		9h	-	21h	-
Language 1	3 ECTS	-	30h	-	-
English or French		-	30h	-	-

Semester 2

		CM	TD	TP	CI
Mathematics 2	6 ECTS	28h	28h	-	-
Linear Algebra I		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	-	-

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Semester 3

	CM	TD	TP	CI
Mathematics 3 5 ECTS	20h	34h	-	-
Linear Algebra II	20h	34h	-	-
Chemistry 3 9 ECTS	30h	30h	36h	-
Reactivity 1 (Industrial Chem)	15h	15h	-	-
Thermodynamics and Kinetics	15h	15h	-	-
Chemistry Lab 3	-	-	36h	-
Chemical Engineering 3 8 ECTS	-	-	20h	63h
Distillation	-	-	-	21h
Operation on Solids	-	-	20h	21h
Liquid-liquid Extraction	-	-	-	21h
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	-	-

Semester 4

	CM	TD	TP	CI
Mathematics 4 5 ECTS	20h	32h	-	-
Vector Analysis	20h	32h	-	-
Chemistry 4 9 ECTS	30h	30h	36h	-
Reactivity 2 (Inorganic)	15h	15h	-	-
Spectroscopies and Electrochemistry	15h	15h	-	-
Chemistry Lab 4	-	-	36h	-
Chemical Engineering 4 7 ECTS	-	-	36h	42h
Chemical Reactors	-	-	-	21h
Chemical. Engineering. Lab 2	-	-	36h	-
Process and Safety	-	-	-	21h
Language 4 3 ECTS	-	30h	-	-
English or French	-	30h	-	-

	CM	TD	TP	CI
Physics 4 3 ECTS	12h	18h	-	-
Fluid Mechanics 2	12h	18h	-	-
Professional Preparation 1 3 ECTS	-	30h	-	-
Soft Skills	-	30h	-	-

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Semester 5

	CM	TD	TP	CI
Mathematics 5 3 ECTS	-	-	-	30h
Ordinary and Partial Differential Equations	-	-	-	30h
Physical Chemistry 5 10 ECTS	-	-	30h	69h
Polymers and Formulation	-	-	-	24h
Analytical Chemistry	-	-	-	24h
Chemistry Lab 5	-	-	30h	-
Applied Chemistry	-	-	-	21h
Chemical Engineering 5 11 ECTS	-	-	30h	66h
Systems Dynamics and Regulation	-	-	-	21h
Catalysis and Environnement	-	-	-	21h
Chemical Engineering Lab 5	-	-	30h	-
Process Simulation	-	-	-	12h
Chemical. Engineering. Project 1	-	-	-	12h
Language 5 3 ECTS	-	30h	-	-
English or French	-	30h	-	-
Professional Preparation 2 3 ECTS	-	36h	-	-
Scientific Writing	-	36h	-	-

Semester 6

	CM	TD	TP	CI
Internship 15 ECTS	4,5h	-	-	-
Internship (8 weeks)	4,5h	-	-	-
Chemistry 6 3 ECTS	3h	-	27h	-
Chemistry Project	3h	-	27h	-
Chemical Engineering 6 9 ECTS	-	40h	-	42h
Bioreactors	-	-	-	21h
Chemical. Engineering. Project 2	-	40h	-	21h
Professional Preparation 3 3 ECTS	-	30h	-	-

	CM	TD	TP	CI
Management and Entrepreneurship	-	30h	-	-