



# Licence Informatique

## Computer Sciences (UFAZ) (délocalisé en Azerbaïdjan)

### Présentation

La licence d'informatique propose une formation en informatique qui vise à donner à un étudiant les connaissances scientifiques et les compétences techniques lui permettant, soit de poursuivre ses études dans un master d'informatique, soit de s'insérer dans le monde professionnel dans les métiers de l'informatique.

Le premier semestre de la première année L1 est commune avec la licence de sciences, mention Mathématiques.

Le deuxième semestre de la première année, la deuxième et la troisième année sont spécifiques à l'informatique.

### Objectifs

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

This curriculum is offered exclusively by the UFAZ ([Université franco-azerbaïdjanaise](#)) and is entirely located in Baku.

The aim of this curriculum in computer science is to provide students with the scientific knowledge and technical skills they need, either to continue their studies in a Master's program in computer science, or to enter the professional world in the IT professions.

### Métiers visés

- Software developer
- System Analyst

### Critères de recrutement

Acceptance decision is the outcome of a specific application process ran in Baku

### Candidater

The application process takes place entirely in Baku.

### Stage

#### Stage en France

Durée du stage : 2 to 3 months

Période du stage : may -- august

#### Stage à l'étranger

Durée du stage : 2 to 3 months

Période du stage : may -- august

### Présentation et organisation de l'équipe pédagogique

All courses are designed and taught by invited professors with PhDs (2/3 of these lecturers are affiliated with a research laboratory at one of the partner institutions).

Composante	<ul style="list-style-type: none"> <li>• <a href="#">UFR de mathématique et d'informatique</a></li> </ul>
Langues d'enseignement	<ul style="list-style-type: none"> <li>• Anglais</li> </ul>
Niveau d'entrée	Baccalauréat (ou équivalent)
Durée	4 ans
ECTS	180
Volume global d'heures	2854
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="#">RNCP40116 : Licence Informatique</a></li> </ul>
Lieu	Baku, Azerbaijan
Campus	<ul style="list-style-type: none"> <li>• Campus Bakou</li> </ul>
Lieu(x) à l'étranger	Baku, Azerbaijan
Secteurs d'activité	<ul style="list-style-type: none"> <li>• <a href="#">Programmation, conseil et autres activités informatiques</a></li> </ul>
Code ROME	<ul style="list-style-type: none"> <li>• <a href="#">Product Owner</a></li> <li>• <a href="#">Technicien / Technicienne de maintenance en informatique</a></li> <li>• <a href="#">Technicien / Technicienne informatique</a></li> <li>• <a href="#">Développeur / Développeuse informatique</a></li> <li>• <a href="#">Administrateur / Administratrice de systèmes d'information (SI)</a></li> </ul>
Stage	Possible
Stage à l'étranger	Possible
Alternance	Non

### Contacts

#### Responsable(s) de parcours

- [Stéphane Genaud](#)

#### Autres contacts

Two teachers from Unistra's Computer Science department are permanently on site to coordinate teaching.

[UFAZ Education Department](#)

Local lecturers with a Master's degree or doctoral students assist the research lecturers with practical sessions.

# Programme des enseignements

## Computer Sciences (UFAZ) (délocalisé en Azerbaïdjan)

### Licence Informatique - Computer Sciences (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	-	-

**Licence 1 Informatique - Computer Sciences (UFAZ)**

<b>Semester 1</b>					
		<b>CM</b>	<b>TD</b>	<b>TP</b>	<b>CI</b>
Mathematics 1	6 ECTS	28h	28h	-	-
Mathematics 1		28h	28h	-	-
Language 1	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Physics 1	6 ECTS	30h	30h	-	-
Fluid mechanics		6h	6h	-	-
Thermodynamics 1		12h	12h	-	-
Point mechanics		12h	12h	-	-
Chemistry	4 ECTS	42h	24h	21h	-
Architecture of matter 1		12h	12h	-	-
Chemistry Lab 1		-	-	21h	-
Computer Science 1	11 ECTS	42h	19,5h	49,5h	-
Front-end Web Programming		12h	-	12h	-
Data Structures and Algorithms 1		21h	19,5h	16,5h	-
Computer Science for Physics and Chemistry		9h	-	21h	-

<b>Semester 2</b>					
		<b>CM</b>	<b>TD</b>	<b>TP</b>	<b>CI</b>
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	-
Language 2	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Computer sciences 2	15 ECTS	60h	30h	60h	-
Computer Architecture		10,5h	7,5h	12h	-
Databases		10,5h	7,5h	12h	-
Object Oriented Programming 1		10,5h	7,5h	12h	-
Cryptography		18h	-	12h	-
Network Algorithms		10,5h	7,5h	12h	-

**Licence 2 Informatique - Computer Sciences (UFAZ)**

<b>Semester 3</b>					
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		CM	TD	TP	CI
Mathematics 3	5 ECTS	20h	34h	-	-
Mathematics 3		20h	34h	-	-
Physics 3	7 ECTS	42h	42h	-	-
Electricity for CS and CE		12h	12h	-	-
Electromagnetism		18h	18h	-	-
Language 3	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Computer sciences 3	15 ECTS	72h	27h	57h	-
Software Engineering		18h	-	12h	-
Signal Processing		12h	18h	-	-
Systems Programming		18h	-	18h	-
IP Networks		12h	9h	9h	-
Back-end Web Programming		12h	-	18h	-

<b>Semester 4</b>					
		CM	TD	TP	CI
Mathematics 4	5 ECTS	20h	32h	-	-
Mathematics 4		20h	32h	-	-
Language 4	3 ECTS	-	30h	-	-
English or French		-	30h	-	-
Physics 4	5 ECTS	-	24h	-	90h
Electronics		12h	12h	-	-
Physics Lab 2		-	-	24h	-
Computer sciences 4	11 ECTS	42h	21h	42h	18h
Data Structures and Algorithms 2		18h	18h	12h	-
Object Oriented Programming 2		-	-	18h	18h
Artificial Intelligence		18h	6h	6h	-
Professional preparation 1	3 ECTS	-	30h	-	-
Soft skills		-	30h	-	-
Student-led project	3 ECTS	-	6h	-	-
Student-led project		-	6h	-	-

### Licence 3 Informatique - Computer Sciences (UFAZ)

<b>Semester 5</b>					
		CM	TD	TP	CI
Computer sciences 5a	10 ECTS	42h	15h	36h	-

	CM	TD	TP	CI	
Parallel Programming	12h	9h	12h	-	
Cloud Computing	15h	-	15h	-	
Software Certification	15h	6h	9h	-	
Computer sciences 5b	14 ECTS	69h	39h	32h	-
Operating Systems Architectures	24h	15h	12h	-	
Mobile application development	7,5h	12h	4,5h	-	
Combinatorics, Probabilities, Statistics	27h	24h	-	-	
Language 5	3 ECTS	-	30h	-	-
English or French	-	30h	-	-	
Professional preparation 2	3 ECTS	-	36h	-	-
Scientific writing	-	36h	-	-	

<b>Semester 6</b>					
	CM	TD	TP	CI	
Internship	15 ECTS	-	-	-	-
Internship (8 weeks)	4,5h	-	-	-	
Computer sciences 6	12 ECTS	60h	45h	15h	-
Introduction to Machine Learning	15h	15h	-	-	
Computer Vision	15h	15h	-	-	
Statistical Thinking And Data Analysis	15h	15h	-	-	
Security	15h	-	15h	-	
Professional preparation 3	3 ECTS	-	30h	-	-
Management and entrepreneurship	-	30h	-	-	