



LICENCE - Informatique

Computer sciences (UFAZ) - Université d'Azerbaïdjan

Objectifs du parcours

Ce parcours est proposé exclusivement dans le cadre de l'[Université franco-azerbaïdjanaise \(UFAZ\)](#).

Contacts

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Langue du parcours	Anglais		
ECTS	180 ECTS		
Volume horaire			
TP : 0h	TD : 0h	CI : 0h	CM : 0h
Formation initiale		Oui	
Formation continue		Non	
Apprentissage		Non	
Contrat de professionnalisation		Non	

Licence 0 - UFAZ

L0 UFAZ - Semester 01

	ECTS	CM	CI	TD	TP	TE	Stage
Basic Mathematics 1	6 ECTS	1.5 h	42 h	4.5 h		63 h	
Basic Maths 1			42 h			63 h	
Working Methodology - Basic Maths 1		1.5 h		4.5 h			
Basic Physics 1	6 ECTS	3 h	39 h	3 h		63 h	
Basic Physics 1			39 h			63 h	
Working methodology - Basic Physics 1		3 h		3 h			
Basic Chemistry 1	6 ECTS	3 h	42 h	3 h		63 h	
Basic Chemistry 1			42 h			63 h	
Working methodology - Basic Chemistry 1		3 h		3 h			
Introduction to Computer Science 1	6 ECTS		33 h	6 h	21 h	90 h	
System, Algorithms and Programming 1			33 h		21 h	90 h	
Working methodology - Intro to Computer Sciences 1				6 h			
Languages 01	6 ECTS			60 h			
English or French				60 h		168 h	

L0 UFAZ - Semester 02

	ECTS	CM	CI	TD	TP	TE	Stage
Basic Mathematics 2	7 ECTS	20 h		60 h			
Algebra, Probability, Statistics		10 h		30 h			
Analysis		10 h		30 h			
Basic Physics 2	6 ECTS	13.5 h	25.5 h		21 h	94.5 h	
Basic Physics 2		13.5 h	25.5 h		21 h	94.5 h	
Basic Chemistry 2	6 ECTS	13.5 h	27 h		21 h	94.5 h	
Basic Chemistry 2		13.5 h	27 h		21 h	94.5 h	
Introduction to Computer Sciences 2	6 ECTS		15 h	24 h	21 h	90 h	
Systems, algorithms, programming 2			15 h	24 h	21 h	90 h	
Basic Geosciences	2 ECTS	13.5 h		7.5 h	3 h	27 h	
Introduction to Geosciences		12 h		3 h	3 h	27 h	
Working methodology		1.5 h		4.5 h			
Languages 02	3 ECTS			30 h			
English or French				30 h		63 h	

Licence 1 - UFAZ

L1 Computer Sciences -Semester 1

	ECTS	CM	CI	TD	TP	TE	Stage
Mathematics 1	6 ECTS	28 h		28 h			
Mathematics		28 h		28 h			
Physics 1	6 ECTS	30 h		30 h			
Point mechanics		12 h		12 h			
Fluid mechanics		6 h		6 h		54 h	
Thermodynamics 1		12 h		12 h		36 h	
Chemistry 1	4 ECTS	12 h		12 h	21 h		
Architecture of matter 1		12 h		12 h			
Chemistry Lab 1					21 h		
Computer science 1	11 ECTS	42 h		19.5 h	49.5 h		
Computer Sciences for Physics and Chemistry		9 h			21 h	36 h	
Front-end Web Programming		12 h			12 h		
Data structures and algorithms 1		21 h		19.5 h	16.5 h		
Languages 1	3 ECTS		72 h				
English or French				30 h			

L1 Computer Sciences -Semester 2

	ECTS	CM	CI	TD	TP	TE	Stage
Mathematics 2	6 ECTS	28 h		28 h			
Mathematics 2		28 h		28 h			
Physics 2	6 ECTS	18 h		18 h	36 h	108 h	
Oscillators, Waves, Optics		18 h		18 h		54 h	
Physics Lab 1					36 h	54 h	
Computer science 2	15 ECTS	60 h		30 h	60 h		
Computer Architecture		10.5 h		7.5 h	12 h		
Databases		10.5 h		7.5 h	12 h		
Object Oriented Programming2		10.5 h		7.5 h	12 h		
Cryptography		18 h			12 h		
Network algorithms		10.5 h		7.5 h	12 h		
Languages 2	3 ECTS			30 h			
English or French				30 h			

Licence 2 - UFAZ

L2 Computer Sciences - Semester 3

	ECTS	CM	CI	TD	TP	TE	Stage
Mathematics 3	5 ECTS	20 h		34 h			
Mathematics 3		20 h		34 h			
Physics 3	7 ECTS	20 h		20 h			
Electromagnetism		18 h		18 h		72 h	
Electricity for CS and CE		12 h		12 h			
Computer Sciences3	15 ECTS	54 h	18 h	9 h	75 h		
Software Engineering			18 h		12 h		
Signal Processing		12 h			18 h		
Systems Programming		18 h			18 h		
IP Networks		12 h		9 h	9 h		
Back-end Web Programming		12 h			18 h		
Languages 3	3 ECTS			30 h			
English or French					30 h		

L2 Computer Sciences -Semester 4

	ECTS	CM	CI	TD	TP	TE	Stage
Mathematics 4	5 ECTS	20 h		32 h			
Mathematics 4		20 h		32 h			
Physics 4	5 ECTS	12 h		12 h			
Electronics		12 h		12 h		36 h	
Physics Lab 2					24 h	36 h	
Computer Sciences 4	11 ECTS	42 h	18 h	21 h	42 h		
Data Structure and Algorithms 2		21 h		21 h	12 h	81 h	
Object Oriented Programming2		10.5 h		7.5 h	12 h		
Artificial Intelligence		21 h			12 h		
Professional preparation 1	3 ECTS			30 h			
Soft skills				30 h			
Student-Led project	3 ECTS		6 h	12 h			
Student-led project							
Languages 4	3 ECTS			30 h			
English or French				30 h			

Licence 3 - UFAZ

L3 Computer Sciences -Semester 5

	ECTS	CM	CI	TD	TP	TE	Stage
Mathematics 5	2 ECTS		30 h				
Linear algebra, Fourier transforms and probability			30 h				
Physics 5	6 ECTS	42 h		42 h		144 h	
Applied Wave Physics		24 h		24 h		72 h	
Electromagnetism		18 h		18 h			
Computer sciences 5a	6 ECTS	27 h		15 h	21 h		
Parallel Programming		12 h		9 h	12 h	49.5 h	
Software Certification		15 h		6 h	9 h		
Computer Sciences 5b	12 ECTS	57 h		33 h	24 h		
Network algorithms		10.5 h		7.5 h	12 h		
Cryptography		18 h			12 h		
Combinatorics, Probabilities and Statistics		27 h		24 h			
Humanities 4	4 ECTS	25.5 h	1.5 h	12 h			
Preparation of internship		4.5 h	1.5 h	12 h			
Management		21 h					

L3 Computer Sciences -Semester 6

	ECTS	CM	CI	TD	TP	TE	Stage
Computer Sciences 6	12 ECTS	21 h	45 h		57 h		
Computer vision			15 h		15 h		
Statistical Thinking And Data Analysis			15 h		15 h		
Artificial Intelligence		21 h			12 h		
Security			15 h		15 h		
Humanities 5	3 ECTS		26 h		12 h		
Marketing for Engineers, Scientists & Technologist			26 h		12 h		
BSc internship	15 ECTS			150 h			
Internship				150 h			