Studies Plan

Systèmes de communication 2023-24

Block A

Language	Code	Section	Teacher	B3 l	B3 e	B3 p	B4 l	B4 e	B4 p	B5 l	B5 e	B5 p	B6 l	B6 e	B6 p	Exam Session	Exam	Credit
Algorithms I																		
E	CS-250	IN	Kapralov Svensson				4h	2h								Sum	Written	8
Analysis III																		
F	MATH-203(c)	MA	Basterrechea	2h	2h											Win	Written	4
Analysis IV																		
F	MATH-207(d)	MA	Basterrechea				2h	2h								Sum	Written	4
Computer networks																		
E	COM-208	SC	Argyraki	2h	2h											Win	Written	5
Signal processing																		
E	COM-202	SC	Prandoni Shkel	4h	2h	2h										Win	Written	8

Block B

Language	Code	Section	Teacher	B3 l	B3 e	B3 p	B4 l	B4 e	B4 p	B5 l	B5 e	B5 p	B6 l	B6 e	B6 p	Exam Session	Exam	Credit
Computer systems																		
E	CS-202	IN	Argyraki Bugnion Chappelier				4h	4h								Sum	Written	8
General physics: electromagnetism																		
E	PHYS-114	PH	Shchutska	2h	2h											Win	Written	4
Introduction to machine learning																		
E	CS-233	IN	Fua Salzmann				2h	2h	2h							Sum	Written	6
Probability and statistics																		
E	MATH-232	MA	Berthier	4h	2h											Win	Written	6

Block C

Language	Code	Section	Teacher	B3 l	B3 e	B3 p	B4 l	B4 e	B4 p	B5 l	B5 e	B5 p	B6 l	B6 e	B6 p	Exam Session	Exam	Credit
Algebra																		
E	MATH-310	MA	Lachowska							2h	2h					Win	Written	4
Computer security and privacy																		
E	COM-301	SC	Troncoso							2h	2h					Win	Written	4
Principles of digital communications																		
E	COM-302	SC	Telatar										4h	2h		Sum	Written	6
Stochastic models in communication																		
F	COM-300	SC	Thiran							4h	2h					Win	Written	6

Group "Optional courses"

Language	Code	Section	Teacher	B3 l	B3 e	B3 p	B4 l	B4 e	B4 p	B5 l	B5 e	B5 p	B6 l	B6 e	B6 p	Exam Session	Exam	Credit
Analytical mechanics (for SPH)																		
F	PHYS-202	PH	De Los Rios	3h	2h											Win	Written	5
Artificial intelligence																		
F	CS-330	IN	Faltings							2h	2h					Sum	During the semester	4
Computer architecture																		
E	CS-200	IN	Khun Jush	4h	4h											Win	Written	8
Computer graphics																		
E	CS-341	IN	Pauly							2h	1h	2h				Sum	Written	6
Computer language processing																		
E	CS-320	IN	Racordon							2h	2h	2h				Sum	During the semester	6

C : Courses, E : Exercice, P : Pratic courses, * : option courses / F : French courses, D : Deutsch courses, E : English Courses / Sum : Summer, Win : Winter

				C	E	P			
Data-intensive systems									
E	CS-300	IN	Ailamaki Kashyap	2h	1h	2h	Sum	Written	6
Electromagnetics I : Transmission lines and waves									
F	EE-200	EL	Fleury		2h	1h	Win	Written	3
Electromagnetics II : field computation									
F	EE-201	EL	Fleury		2h	1h	Sum	Written	3
Electronics I									
F	EE-202(b)	EL	Sallese Zysman	2h	1h		Win	During the semester	4
Electronics II									
F	EE-203(b)	EL	Sallese Zysman		2h	2h	Win	During the semester	4
Electronics III									
F	EE-381	EL			2h	1h	Sum	During the semester	3
General chemistry									
F	CH-160(b)	CGC	Terrettaz		2h	1h	Win	Written	3
Human computer interaction									
F	CS-213	IN	Egger	2h	2h		Sum	Written	5
Internet analytics									
E	COM-308	SC	Grossglauser		2h	1h 2h	Sum	Written	6
Introduction to life sciences (for IC)									
F	BIO-109	SV	Zufferey	4h	2h		Sum	Written	6
Introduction to multiprocessor architecture									
E	CS-307	IN	Falsafi		2h	1h	Win	During the semester	4
Introduction to operating systems									
E	CS-323	IN	Kashyap		2h	1h 2h	Win	Written	5
Introduction to quantum computation									
E	CS-308	IN	Lévêque Urbanke		3h	1h	Sum	Written	5
Introduction to quantum information processing									
E	COM-309	SC	Macris		3h	1h	Win	Written	5
Making intelligent things									
E	CS-358	IN	Koch			8h	Sum	During the semester	8
Microprogrammed Embedded Systems									
F	EE-310	EL	Atienza Alonso		2h	2h	Win	Oral	4
Numerical methods for visual computing and ML									
E	CS-328	IN	Jakob	2h	2h		Win	Written	4
Parallelism and concurrency									
E	CS-206	IN	Kashyap Kuncak	1h	1h	2h	Sum	During the semester	4
Parallelism and concurrency in software									
E	CS-302	IN			3h	3h	Sum	During the semester	6
Quantum mechanics I									
E	PHYS-207	PH	Banerjee	3h	2h		Sum	Written	5
Signal processing for communications									
E	COM-303	SC	Prandoni		4h	2h	Sum	Written	6
Software construction									
E	CS-214	IN	Kuncak Odersky Pit-Claudel	3h	2h	3h	Win	Written	8
Technologies for democratic society									
E	CS-234	IN	Estrada-Galiñanes	2h	1h	2h	Win	Written	5
Theory of computation									
E	CS-251	IN	Göös	2h	2h		Sum	Written	6
The software enterprise - from ideas to products									
E	CS-311	IN	Bugnion Candea		2h	1h 10h	Sum	During the semester	8

Group I "Project"

Language	Code	Section	Teacher	Bachelor 3			Bachelor 4			Bachelor 5			Bachelor 6			Exam Session	Exam	Credit
				l	e	p	l	e	p	l	e	p	l	e	p			
	Communications project																	
E	COM-304	SC	Al Hassanieh Zamir										2h	10h		Sum	During the semester	8
	Projet de recherche en Systèmes de communication I																	
F	COM-307	SC	Profs divers							2h			2h			Sum Win	During the semester	8

Transverse block HSS

Language	Code	Section	Teacher	Exam Session	Exam	Credit
	SHS : Bachelor cycle BA6					
F		SHS				2
	HSS : Bachelor cycle BA5					
F		SHS				2
	HSS : Bachelor cycle BA4					
F		SHS				2
	HSS : Bachelor cycle BA3					
F		SHS				2

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