

Cours	Enseignants	🌳		🌳		Examen	Crédits	
		Automne	Printemps	Automne	Printemps			
<b>Bloc général plan libre</b>								<b>TOTAL 90</b>
<b>Master of Science in Computer Science</b>								<b>TOTAL 90</b>
<b>Teaching Units</b>								<b>TOTAL 60</b>
<b>General</b>								<b>TOTAL</b>
Interdisciplinary Computing	M. Courant	2ph+1ph		2ph+1ph		oral	5	
User Centered Design (University of Fribourg)	D. Lalanne A. Lisowska Masson	2ph+1ph		2ph+1ph		écrit	5	
Future User Interfaces (FUI): multimodal, plastic and natural	D. Lalanne		2ph+1ph		2ph+1ph	écrit	5	
Pervasive Computing: Selected Topics	P. Bruegger B. Hirsbrunner A. Lisowska Masson		2ph+1ph		2ph+1ph	écrit	5	
Parallel Architectures	E. Sanchez		2ph+1ph		2ph+1ph	écrit	5	
Philosophie de l'IA : les fondements du cognitivisme classique	O. JORAND		2ph+1ph		2ph+1ph	oral	5	
R&D Workshop	H. MERCIER J. SAVOY		4ph		4ph	controle continu	10	
Seminar Interaction Design	A. Lisowska Masson	2ph		2ph		controle continu	5	
<b>Distributed Systems</b>								<b>TOTAL</b>
Mobile Communications	T. Braun	2ph+1ph		2ph+1ph		écrit	5	
Advanced Networking and Future Internet	T. Braun		2ph+1ph		2ph+1ph	écrit	5	
Distributed Systems	P. KROPF M. PASIN	2ph+2ph		2ph+2ph		écrit	5	
Security	H. SANGULARD	2ph+2ph		2ph+2ph		oral	5	
Concurrency: Foundations and Algorithms	P. FELBER		2ph+2ph		2ph+2ph	écrit	5	
Large-scale Distributed Systems	E. RIVIERE		2ph+2ph		2ph+2ph	écrit	5	
Advanced Software Engineering (University of Fribourg)	J. Vogel	2ph+1ph		2ph+1ph		oral	5	
Big Data	P. Cudré-Mauroux	2ph+1ph		2ph+1ph		écrit	5	
Theory and Application of Automated Verification	U. Ultes-Nitsche	2ph+1ph		2ph+1ph		oral	5	
Web Engineering	O. Abou Khaled P. FELBER E. Mugellini	2ph+1ph		2ph+1ph		oral	5	
Scientific Reading in Computer Networks	T. Braun	1pg		1pg		controle continu	5	
Scientific Writing in Computer Networks	T. Braun	1pg		1pg		controle continu	5	
Seminar Communication and Distributed Systems	T. Braun	2ph		2ph		controle continu	5	
Scientific Reading in Computer Networks	T. Braun		1pg		1pg	controle continu	5	
Scientific Writing in Computer Networks	T. Braun		1pg		1pg	controle continu	5	
Seminar Communication and Distributed Systems	T. Braun		2ph		2ph	controle continu	5	
Seminar Pervasive Artificial Intelligence	M. Courant B. Hirsbrunner	1pg		1pg		controle continu	5	
Seminar Pervasive Artificial Intelligence	M. Courant B. Hirsbrunner		1pg		1pg	controle continu	5	
<b>Advanced Software Engineering</b>								<b>TOTAL</b>
Compiler Construction	M. Lungu O. Nierstrasz		2ph+1ph		2ph+1ph	écrit	5	
Software Design and Evolution	M. Lungu O. Nierstrasz	2ph+1ph		2ph+1ph		écrit	5	
Seminar Software Composition	M. Lungu O. Nierstrasz	2ph		2ph		controle continu	5	
Seminar Software Composition	M. Lungu O. Nierstrasz		2ph		2ph	controle continu	5	
<b>Advanced Information Processing</b>								<b>TOTAL</b>
Computational Photography (University of Bern)	M. Zwicker	2ph+1ph		2ph+1ph		écrit	5	
Rendering Algorithms (University of Bern)	M. Zwicker		2ph+1ph		2ph+1ph	écrit	5	
Computer Vision	P. Favaro	2ph+1ph		2ph+1ph		écrit	5	
Convex Optimization	P. Favaro		2ph+1ph		2ph+1ph	écrit	5	
Natural language processing	J. SAVOY		2ph+2ph		2ph+2ph	écrit	5	
Information retrieval and internet	J. SAVOY	2ph+2ph		2ph+2ph		écrit	5	
Machine learning and data mining	J. SAVOY	2ph+2ph		2ph+2ph		écrit	5	
Statistical Learning Methods	J. SAVOY		2ph+2ph		2ph+2ph	écrit	5	
Design and Graphics Programming for Game Development (University of Fribourg)	M. Rigamonti		2ph+1ph		2ph+1ph	oral	5	
Applications of Artificial Intelligence	M. Eichenberger-Liwicki	2ph+1ph		2ph+1ph		oral	5	
Document Analysis	R. Ingold		2ph+1ph		2ph+1ph	oral	5	
Seminar Computer Graphics	M. Zwicker	2ph		2ph		controle continu	5	
Seminar Computer Vision	P. Favaro	2ph		2ph		controle continu	5	
Seminar Computer Graphics	M. Zwicker		2ph		2ph	controle continu	5	
Seminar Computer Vision	P. Favaro		2ph		2ph	controle continu	5	
Seminar Natural Language Processing	J. SAVOY	2ph		2ph		controle continu	5	
Seminar Collaborative Data Visualization	D. Lalanne	1pg		1pg		controle continu	5	
Seminar Pattern Recognition and Machine Learning for Human Activity	O. Abou Khaled E. Mugellini	1pg		1pg		controle continu	5	
Seminar Human Building Interaction	D. Lalanne		1pg		1pg	controle continu	5	
Seminar Scientific Communication in Document Image Analysis: Reading, Writing, and Presentation Skills	M. Eichenberger-Liwicki		1pg		1pg	controle continu	5	
Seminar Visualization Patterns and Scalability	V. Atanasiu	1pg		1pg		controle continu	5	
<b>Logic</b>								<b>TOTAL</b>
Complexity Theory	T. Strahm		2ph+1ph		2ph+1ph	écrit	5	

Justification Logic	T. Studer	2ph+1ph	2ph+1ph	oral	5	
Lambda Calculus	G. Jäger	2ph+1ph	2ph+1ph	oral	5	
Explicit Mathematics and Type Theory	G. Jäger		2ph+1ph	2ph+1ph	oral	5
Probabilistic Algorithms (6 ECTS)	I. COTOFREI	4ph	4ph	écrit	5	
Automata on Infinite Structures	U. Ultes-Nitsche		2ph+1ph	2ph+1ph	oral	5
Seminar Algebra and Logic	G. Jäger G. Metcalfe T. Strahm	2ph	2ph	controle continu	5	
Seminar Logic and Theoretical Computer Science	G. Jäger	2ph	2ph	controle continu	5	
Seminar Algebra and Logic	G. Jäger G. Metcalfe		2ph	2ph	controle continu	5
Seminar Logic and Theoretical Computer Science	G. Jäger		2ph	2ph	controle continu	5
Seminar Logic and Information	G. Jäger G. Metcalfe K. STOFFEL U. Ultes-Nitsche	1pg	1pg	controle continu	5	
Seminar Logic and Information	G. Jäger G. Metcalfe K. STOFFEL U. Ultes-Nitsche		1pg	1pg	controle continu	5
<b>Information Systems and Decision Support</b>						
E-gouvernement frameworks	A. SANDOZ		2ph+2ph	2ph+2ph	oral	5
Combinatorial Optimization	T. Hürlimann	2ph+1ph	2ph+1ph	oral	5	
Quantitative Models in Revenue Management (University of Fribourg)	R. Bürgy		2ph+1ph	2ph+1ph	écrit	5
Transportation Logistics: Quantitative Models and Methods	I. Blöchliger T. Hürlimann		2ph+1ph	2ph+1ph	oral	5
Best Practice in Mathematical Modelling	T. Hürlimann	2ph+1ph	2ph+1ph	oral	5	
Seminar Social Computing	P. Cudré-Mauroux	1pg	1pg	controle continu	5	
<b>Rattrapage</b>						
Structure de données et algorithmique	A. SANDOZ		2ph+2ph	controle continu	6	
Systèmes répartis	M. PASIN		2ph+2ph	écrit	6	
Algèbre linéaire	A. VALETTE		4ph+3ph+1j	controle continu	9	
Mathématiques discrètes et applications	H. MERCIER		2ph+2ph	écrit	6	
Informatique générale : programmation I	P. FELBER		2ph+2ph	controle continu	6	
Informatique générale : programmation II	P. FELBER		2ph+2ph	controle continu	6	
Intelligence artificielle	J. SAVOY		2ph+2ph	écrit	6	
Operating Systems	E. RIVIERE		2ph+2ph	écrit	6	
Langages et compilation	P. FELBER		2ph+2ph	oral	6	
					<b>TOTAL</b>	<b>30</b>