

Cours	Enseignants	🌟 Automne	🌱 Printemps	Examen	Crédits	
Master of Science in Computer Science						TOTAL 90
Teaching Units						TOTAL 60
General						TOTAL
Interdisciplinary Computing	M. Courant	2ph+1ph		oral	5	
User Centered Design (University of Fribourg)	D. Lalanne A. Lisowska Masson	2ph+1ph		écrit	5	
Future User Interfaces (FUI): multimodal, plastic and natural	D. Lalanne		2ph+1ph	écrit	5	
R&D Workshop	H. MERCIER J. SAVOY V. Schiavoni		4ph	controle continu	10	
Seminar Interdisciplinary Issues in ICT	M. Courant	1pg		controle continu	5	
Seminar Interdisciplinary Issues in ICT	M. Courant		1pg	controle continu	5	
Distributed Systems						TOTAL
Mobile Communications	T. Braun		2ph+1ph	écrit	5	
Internet of Things	T. Braun	2ph+1ph		écrit	5	
Distributed Systems	V. Schiavoni	2ph+2ph		écrit	5	
Security	H. SANGLARD	2ph+2ph		oral	5	
Advanced Software Engineering (University of Fribourg)	J. Pasquier	2ph+1ph		écrit	5	
Verification of Cyber-physical Systems	U. Ultes-Nitsche	2ph+1ph		oral	5	
Web Engineering	O. Abou Khaled P. FELBER E. Mugellini	2ph+1ph		écrit	5	
Scientific Reading in Computer Networks	T. Braun	1pg		controle continu	5	
Scientific Writing in Computer Networks	T. Braun	1pg		controle continu	5	
Seminar Communication and Distributed Systems	T. Braun	2ph		controle continu	5	
Scientific Reading in Computer Networks	T. Braun		1pg	controle continu	5	
Scientific Writing in Computer Networks	T. Braun		1pg	controle continu	5	
Seminar Communication and Distributed Systems	T. Braun		2ph	controle continu	5	
Seminar Foundations of Dependable Systems I	U. Ultes-Nitsche	1pg		controle continu	5	
Advanced Software Engineering						TOTAL
Concurrency: State Models and Design Patterns	M. Ghafari O. Nierstrasz	2ph+1ph		écrit	5	
Programming Languages	O. Nierstrasz		2ph+1ph	écrit	5	
Seminar Software Composition	O. Nierstrasz	2ph		controle continu	5	
Seminar Software Composition	O. Nierstrasz		2ph	controle continu	5	
Concurrency: Multi-core Programming and Data Processing	P. FELBER		2ph+2ph	écrit	5	
Advanced Information Processing						TOTAL
Computer Vision	P. Favaro	2ph+1ph		écrit	5	
Advanced Machine Learning	P. Favaro		2ph+1ph	écrit	5	
Structural Pattern Recognition	K. Riesen	2ph+1ph		écrit	5	
Natural language processing	J. SAVOY	2ph+2ph		écrit	5	
Machine learning and data mining	J. SAVOY	2ph+2ph		écrit	5	
Applied Coding and Information Theory	H. MERCIER		2ph+2ph	oral	5	
Design and Graphics Programming for Game Development (University of Fribourg)	M. Rigamonti		2ph+1ph	écrit	5	
Applications of Artificial Intelligence	M. Liwicki	2ph+1ph		oral	5	
Pattern Recognition	A. Fischer		2ph+1ph	écrit	5	
Very Deep Learning - Recent Methods and Technologies	M. Liwicki	2ph+1ph		oral	5	
Seminar Computer Vision	P. Favaro	2ph		controle continu	5	
Seminar Computer Vision	P. Favaro		2ph	controle continu	5	
Seminar Natural Language Processing	J. SAVOY	2ph		controle continu	5	
Seminar Human Building Interaction	D. Lalanne J. Nembrini	1pg		controle continu	5	
Seminar Data Visualization	F. Evéquoz D. Lalanne		1pg	controle continu	5	
Seminar Scientific Communication in Document Image Analysis: Reading, Writing, and Presentation Skills	M. Liwicki		1pg	controle continu	5	
Seminar Affective Computing for Empathic Behaviour Change	O. Abou Khaled D. Lalanne E. Mugellini	1pg		controle continu	5	
Seminar Chatbots and Conversational Agents	O. Abou Khaled P. Cudré-Mauroux E. Mugellini	1pg		controle continu	5	
Logic						TOTAL
Working Group Operations, Sets, and Types	G. Jäger	2ph+1ph		oral	5	
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Description Logic	T. Studer	2ph+1ph		écrit	5	
Probabilistic Algorithms (6 ECTS)	I. COTOFREI	4ph		écrit, Note d'enseignement	5	
Seminar Logic and Theoretical Computer Science	G. Jäger	2ph		controle continu	5	
Seminar Algebra and Logic	G. Jäger G. Metcalfe	2ph		controle continu	5	
Seminar Logic and Theoretical Computer Science	G. Jäger		2ph	controle continu	5	
Seminar Logic and Information	G. Jäger G. Metcalfe K. STOFFEL U. Ultes-Nitsche	1pg		controle continu	5	
Seminar Logic and Information	G. Jäger G. Metcalfe K. STOFFEL U. Ultes-Nitsche		1pg	controle continu	5	
Information Systems and Decision Support						TOTAL

E-gouvernement frameworks	A. SANDOZ	2ph+2ph	oral	5
Transportation Logistics: Quantitative Models and Methods	T. Hürlimann	2ph+1ph	oral	5
Best Practice in Mathematical Modelling	T. Hürlimann	2ph+1ph	oral	5
Graph Theory and Applications	B. Ries	2ph+1ph	écrit	5
Data Science				TOTAL
Big Data Infrastructures	P. Cudré-Mauroux	2ph+1ph	écrit	5
Social Media Analytics	P. Cudré-Mauroux M. Khayati	2ph+1ph	écrit	5
Seminar Data Science	M. Khayati	1pg	controle continu	5
Rattrapage				TOTAL 30
Structure de données et algorithmique	A. SANDOZ	2ph+2ph	controle continu	6
Systèmes répartis	P. KROPF V. Schiavoni	2ph+2ph	écrit	6
Algèbre linéaire	A. VALETTE	4ph+3ph+1j	écrit	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	V. Schiavoni	2ph+2ph	écrit	6
Langages et compilation	P. FELBER	2ph+2ph	oral	6