

2021-2022

Mastère de Recherche Domaine : Informatique Mention : Master of Science in Digital Technologies for Health care										
Unité d'enseignement	Elément constitutif d'UE (ECUE)	Volume horaire			Crédits		Coef,		Modalité d'évaluation	
		Cours	TD	TP	ECUE	UE	ECUE	UE	Contrôle continu	Régime mixte
Semestre 1										
Advanced Computing I	Software programming	31,5			3	6	1,5	3		X
	Mobile apps development	31,5			3		1,5			X
Artificial Intelligence I	Artificial Intelligence (Machine learning/deep learning) I	31,5			4	4	2	2		X
Data engineering	Data acquisition and signal processing	31,5			3	6	1,5	3		X
	Motion analysis/3D modeling	31,5			3		1,5			X
Physical activity and health science	Motor Control and development	31,5			2		1			X
	Basics in Neurosciences and physiology	31,5			3	8	1,5	4		X
	Chronic diseases: prevention and intervention	31,5			3		1,5			X
Quantitative analysis	Descriptive statistics	31,5			3	6	1,5	3		X
	Cloud for Scientific data management	31,5			3		1,5			X
Semestre 2										
Advanced Computing II	Medical imaging and EEG/EMG	31,5			3	6	1,5	3		X
	Data privacy / security and ethics	31,5			3		1,5			X
Artificial Intelligence II	Data science and big data analysis	31,5			3	6	1,5	3		X
	Computer Vision and pattern recognition	31,5			3		1,5			X
Electrical and electronic engineering	Biomedical sensors	31,5			3	6	1,5	3		X
	Embedded systems for health applications	31,5			3		1,5			X
Bridge modules	Mathematical modeling of control systems	21			2	4	1	2		X
	Inferential statistics	21			2		1			X
Internship	One month internship in germany or in a lab /company/ research center	0			8	8	4	4	X	

La Directrice
Dr. Nadia Bouassida



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Semestre 3										
Artificial Intelligence III	Artificial Intelligence: deep learning for health II	42			4	4	2	2		X
Advanced Computing III	Motion control for health applications	31,5			3	6	1,5	3		X
	Virtual augmented reality	31,5			3		1,5			X
Research in physical and mental health	Performance analysis and individualized training	31,5			3	6	1,5	3		X
	Monitoring of physical performance and mental health	31,5			3		1,5			X
Advanced digital health technologies	New trends in health systems	31,5			3	6	1,5	3	X	
	lot for health	31,5			3		1,5			X
Bridge modules	Research Methodology	42			4	8	2	4	X	
	Design thinking / start-up	42			4		2		X	
Semestre 4										
End of study project	End of study project	0			30	30	15	15	X	

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