

Scientific modules		UE	Code EC	Name EC	Component Code	Component Name	Total hours	Lecture hours	Tutorial (TD) hours	Lab (TP) hours	Evaluation	Course language	ECTS Credits		
Code UE = ISSSSC11 / Responsable UE = D. DRAGOMIRESCU		ISSSSD11		Smart Devices	ISSSSD11_01	Microcontrollers and Open-Source Hardware, Embedded IA (M&OSH)	25	1,25	23,75		Portfolio	EN	2		
					ISSSSD11_02	CAD, manufacturing and integration of nano-technology sensors (AIME)	13,75			13,75	Portfolio	EN	1		
					ISSSSD11_03	Sensors introduction	11,25	8,75	2,5		Portfolio	EN	1		
					ISSSSD11_04	Analog electronic labs	2,75			2,75	Portfolio	EN	0		
		ISSSWN11	Wireless Sensors Network	ISSSWN11_01	Wireless Sensors Network	18,25	10		8,25	Portfolio	EN	1			
		ISSSIA11	Embedded IA for IoT	ISSSIA11_01	Embedded IA for IoT	15,75	7,5		8,25	Portfolio	EN	1			
		ISSSSE11	Security for IoT	ISSSSE11_01	Security for connected objects	34,5	12,5		22	Portfolio	EN	2			
		ISSSEC11	Energy for connected objects	ISSSEC11_01	Energy for connected objects (recovery, transfert)	10,5	5		5,5	Portfolio	EN	1			
		ISSSIP11	Innovative Project 1	ISSSIP11_01	Innovative Project	19,25			19,25	Portfolio	EN	2			
		ISSSPO11	Portfolio 1	ISSSPO11_01	Portfolio	4		1,25	2,75	Portfolio	EN	1			
									155	45	27,5	82,5			12
		Code UE = ISSSS111 / Responsable UE = T. MONTEIL		ISSSWC12	Wireless Communications	ISSSWC12_01	Communication protocols for LP-WPAN	7,5	3,75	3,75			Portfolio	EN	1
						ISSSWC12_02	Emerging network (SDN, NGN)	10,5	5		5,5	Portfolio	EN	1	
ISSSFG12	5G Technologies			ISSSFG12_01	5G Technologies	7,5	7,5			Portfolio	EN	1			
ISSSMS12	Middleware and Services			ISSSMS12_01	Service architecture	31	7,5	12,5	11	Portfolio	EN	2			
				ISSSMS12_02	Software engineering	2,5		2,5		Portfolio	EN	0			
				ISSSMS12_03	Middleware for Internet of Things	14,75	3,75		11	Portfolio	EN	1			
				ISSSMS12_04	Cloud and Edge computing	21,5	5		16,5	Portfolio	EN	2			
ISSSIP12	Innovative Project 2			ISSSIP12_01	Innovative project	19,25			19,25	Portfolio	EN	2			
ISSSPO12	Portfolio 2			ISSSPO12_01	Portfolio	2,75			2,75	Portfolio	EN	1			
ISSSEN12	English			ISSSEN12_01	English	30			30	Portfolio	EN	1			
							147,25	32,5	48,75	66			12		
Humanités		UE	Code EC	Name EC	Component Code	Component Name	Total hours	Lecture hours	Tutorial (TD) hours	Lab (TP) hours	Evaluation	Course language	ECTS Credits		
ISSDHUM11 / à déterminer	ISSCCGE21	Relations humaines et professionnelles, Ethique	ISSDHUMME11	Management d'équipe	17,5	17,5							6		
			ISSDHUMPSE11	Psychologie sociale et éthique	17,5		17,5								
			ISSDHUMAPS11	APS	21,5		21,5								
			ISSDHUMPP11	PPI	8		8								
			ISSDHUMEGAE11	EGA/EA											
			ISSDHUMART11	ART											