

## Department of Environmental Sciences, Informatics and Statistics

## Master's Degree Programme in Computer Science Ministerial degree code LM-18 (Computer Science)

**Curriculum Software Dependability and Cyber Security** 

Students enrolled in A.Y. 2020/21

## RECOMMENDED CAREER PLAN

	Year	Semester	Exam code	Scientific sector	Subject	Credits	Tot credits	Notes
A.Y.2020/21	1	I	CM0470	INF/01	Advanced algorithms and programming methods - MOD. 1 + MOD. 2	12		
		I	CM0546	SECS-S/01	Applied Probability for Computer Science	6		
		I	CM0474	INF/01	Formal methods for system verification	6 6 54		
		I	CM0475-1	INF/01	Security MOD. 1		54	One 12 credits exam with mod. 2
		П	CM0480	INF/01	Cryptography			
		П	CM0475-2	INF/01	Security MOD. 2	6		One 12 credits exam with mod. 1
		П	CM0476	INF/01	Software Correctness, Security, and Reliability	6		
		П	CM0481	INF/01	Software Performance and Scalability			
A.Y. 2020/21 or 2021/22	Complete the study plan with							
	Choose from 12 to 18 credits among					-	ľ	
	1 or 2	1	CM0190	INF/01	Bioinformatics	-		recommended year 2
			CM0227	INF/01	High Performance Computing			recommended year 2
			CM0482	INF/01	Human Computer Interaction and Information Visualization			recommended year 2
			CM0524	INF/01	Image and video understanding			recommended year 1
		II	CM0526	INF/01	Geometric and 3D Computer Vision			recommended year 2
	Choose from 0 to 6 credits among					18		
	1 or 2	1	CM0520	INF/01	Advanced Data Management		36	recommended year 1
		II	CM0491	ING-INF/05	Artificial Intelligence: Knowledge Representation and Planning			recommended year 1
			CM0492	INF/01	Artificial Intelligence: Machine Learning and Pattern Recognition			recommended year 1
			CM0468	INF/01	Cloud Computing and Distributed Systems			recommended year 1
			CM0473	INF/01	Information Retrieval and Web Search			recommended year 1
	Choose 6 credits among							-
	1 or 2	I	CM0469	MAT/09	Calculus and Optimization	6		recommended year 1
			CM0527	SECS-S/01	Computational Statistics and Simulation			recommended year 2
			CM0471	SECS-S/01	Statistical Inference and Learning			recommended year 1
		II	CM0525	INF/01	Cryptography foundation			
	Choose 12 credits among							
	1 or 2	loll	- Activities not ye	et chosen includir	ng the Data Management and Analytics curriculum ones	12		
			- Activities offere	ed in the Universit	ty (subject toTeaching committee authorization)			
A.Y. 2021/22	2	11	CM0095	NN	Internship	6 30	30	Information: https://www.unive.it/pag/19911/
			CM0082	PROFIN_S	Final exam		30	
						tot. credits	120	

ATTENTION: elective courses may differ from year to year; students are invited to check the offer annually.