



Università  
Ca' Foscari  
Venezia

Ca' Foscari University of Venice  
Department of Environmental Sciences, Informatics and Statistics

## Master of Science in Computer Science and Information Technology

LM-18 (Computer Science)  
Curriculum Software Development and Engineering (SDE)

Enrolled in A.Y.  
2023/2024

CM90  
ord. 2022  
reg. 2023

### RECOMMENDED CAREER PLAN

	Year	Semester	Exam code	Academic discipline	Course	Credits	Tot.
MANDATORY EXAMS							
a.y. 2023/24	1	I	CM0546	SECS-S/01	Applied Probability for Computer Science	6	54
			CM0632	INF/01	Advanced Programming Languages	6	
			CM0474	INF/01	Formal Methods for System Verification	6	
			CM0639-1	INF/01	Software Architectures and Development Methodology - Software Architectures	6	
			CM0639-2	ING-INF/05	Software Architectures and Development Methodology - Development Methodologies	6	
			CM0631-1	INF/01	System and Software Security - System Security	6	
		II	CM0476	INF/01	Software Correctness, Security, and Reliability	6	
			CM0481	INF/01	Software Performance and Scalability	6	
			CM0631-2	ING-INF/05	System and Software Security - Software Security	6	
a.y. 2024/25	2	II	CM0095	NN	Stage	6	30
			CM0082	PRO-FIN	Thesis	24	
					ELECTIVE *		
					CORE EXAMS - From 12 to 18 credits among		
1	I	CM0480	INF/01	Cryptography	6	18	
1	II	CM0468	INF/01	Cloud Computing and Distributed Systems	6		
1	II	CM0627	ING-INF/05	Network Security	6		
1	II	CM0628	INF/01	Web Security	6		
2	I	CM0482	INF/01	Human Computer Interaction and Information Visualization	6		
					CORE EXAMS - From 0 to 6 credits among		
1	I	CM0636	ING-INF/05	Foundations of Artificial Intelligence	6		
1	I	CM0635	INF/01	Foundations of Machine Learning	6		
1	II	CM0637	INF/01	Algorithms for Massive Data	6		
1	II	CM0638	ING-INF/05	Learning with Massive Data	6	6	
1	II	CM0473	INF/01	Information Retrieval and Web Search	6		
					COMPLEMENTARY EXAMS - 6 credits among		
2	I	CM0471	SECS-S/01	Statistical Inference and Learning	6	6	
2	II	CM0190	INF/01	Bioinformatics	6		
2	II	CM0601	ING-INF/05	Quantum Computation	6		
2	II	CM0629	SECS-S/01	Time Series Analysis for Computer Science	6		
					CHOISE BASED ON PERSONAL INTEREST: 12 credits among		
1 or 2	I or II	Courses of Computer Science and Information Technology (not chosen before and of other curricula)				12	12
		Courses provided specifically for the Master course (established annually)					
		Courses of the University's (Master or Degree courses)					
						Tot.	120

#### Language

English. The language of activities select as "elective courses based on personal interest" can be different

#### English language requirement

A minimum B2-level knowledge of English is mandatory for enrolment. Information about recognised certifications and exemption categories at page <https://www.unive.it/pag/16406/>

\* Elective courses can be attend in the first year or in the second one. Here's a tip for balancing your workload.

For information visit the course website <http://www.unive.it/cdl/cm90>