

Curriculum Master Computational Science 2021-2022										
	Semester 1					Semester 2				
	block 1		block 2		block 3	block 4		block 5		block 6
	September	October	November	December	January	February	March	April	May	June
Compulsory Core Courses (year 1) <b>24 EC</b>	Introduction Computational Science (UvA)		Numerical Algorithms (UvA)							Complex System Simulation (UvA)
	Seminars Computational Science (UvA)		Seminars Computational Science (UvA)			Seminars Computational Science (UvA)		Seminars Computational Science (UvA)		
Restricted-Choice Elective Courses (year 1 and 2) <b>30 EC</b>	Evolutionary Computing (VU)		Performance of Networked Systems (VU)		Agent-Based Modelling (UvA)	Computational Finance (UvA)		Computational Biology (UvA)		
	Large Scale Data Engineering (VU)		Stochastic Simulation (UvA)		Biosystems Data Analysis (UvA)	Experimental Design and Data Analysis (VU)		Data Mining Techniques (VU)		
	Programming Large-scale Parallel Systems (VU)					Scientific Computing (UvA)		Distributed Algorithms (VU)		
Free-Choice Elective Courses (year 1 and 2) <b>24 EC</b>	Advanced Computer Networks (VU)		Algorithms in Sequence Analysis (VU)		Analysis and Modelling Lab (UvA)	Information Theory (UvA)		Advanced topics in Computational Finance (UvA)		Advanced Computational Condensed Matter (UvA) (3EC)
	Bioinformatics I (UvA)		Complex Economic Dynamics (UvA) (5EC)		Parallel Programming Practical (VU)	Parameter Estimation Applied to Medical and Biological Sciences (VU)		Bioinformatics for Translational Medicine (VU)		Machine Learning for the Quantified Self (VU)
	From Physics to Physiology (VU)		Distributed Systems (VU)		Understanding Molecular Simulation (UvA)	Programming Multi-core and Many-core Systems (UvA)		Bioinformatics II (UvA)		
	Fundamental Topics in Statistical Physics1 (UvA) (3EC)		Scientific Visualisation & Virtual Reality (UvA)			Theory of Complex Systems (UvA)		Biomolecular Simulations (UvA)		
	Fundamentals of Bioinformatics (VU)		Statistical Theory of Complex Molecular Systems (UvA)					Fundamental Topics in Statistical Physics 2 (UvA) (3EC)		
	Machine Learning 1 (UvA)		The Social Web (UvA)			Stochastic Calculus (UvA)				
	Uncertainty Quantification (UvA)									
Core Course (year 2) <b>42 EC</b>					Master Thesis Computational Science					