

Specialisations in the Master Computational Science 2023-2024										
	Semester 1					Semester 2				
Application domain	block 1		block 2		block 3	block 4		block 5		block 6
	September	October	November	December	January	February	March	April	May	June
Computational Science Core	Machine Learning 1 (UvA) 6EC		Advanced Computer Networks (VU) 6EC			Experimental Design and Data Analysis (VU) 6EC				Machine Learning for the Quantified Self (VU) 6EC
			The Social Web (VU) 6EC							
Computational Finance / Economics <i>Drona Kandhai</i>	Advanced topics in Computational Finance (UvA) 6EC		Advanced topics in Computational Finance (UvA) 6EC			CED 2: Optimal Control and Environmental Tipping (UvA) 5EC				
			CED 1: Learning, Stability and Chaos (UvA) 5EC			Computational Finance (UvA) 6EC				
						Stochastic Calculus (UvA) 5EC				
Computational Biology <i>Jaap Kaandorp</i>	Bioinformatics I (UvA) 6EC		Algorithms in Sequence Analysis (VU) 6EC					Bioinformatics II (UvA) 6EC		
	Fundamentals of Bioinformatics (VU) 6EC							Bioinformatics for Translational Medicine (VU) 6EC		
Computational Biomedicine <i>Gábor Závorszky</i>	From Physics to Physiology (VU) 6EC					Parameter Estimation Applied to Medical & Biological Science (VU) 6EC		Biomolecular Simulations (UvA) 6EC		
			Uncertainty Quantification (UvA) 6EC							
Computational Chemistry and Physics <i>Edan Lerner and Peter Bolhuis</i>	Non-equilibrium Statistical Physics (UvA) 3EC		Statistical Theory of Complex Molecular Systems (UvA) 6EC		Understanding Molecular Simulation (UvA) 6EC			Biomolecular Simulations (UvA) 6EC		Advanced Computational Condensed Matter (UvA) 3EC
	Physics of Complex Systems: Dynamics and Chaos (UvA) 3EC									
High Performance Computing <i>Henri Bal</i>	Programming Large-scale Parallel Systems (VU) 6EC		Distributed Systems (VU) 6EC							
Computational Social Choice <i>Vitor Vasconcelos and Debraj Roy</i>			Computational Social Choice (UvA) 6EC					Game Theory (UvA) 6 EC		
			Stochastic Simulation (UvA) 6EC					Theory of Complex Systems (UvA) 6 EC		
Sci. Computing / Numerical Math <i>Daan Crommelin</i>			Numerical Linear Algebra (UvA) 8EC							
			Uncertainty Quantification (UvA) 6EC			Scientific Computing (UvA) 6EC				
	Course choices in consultation with the specialisation coordinator									
Complex Systems <i>Rick Quax</i>	Physics of Complex Systems: Dynamics and Chaos (UvA) 6EC		Stochastic Simulation (UvA) 6EC							
								Theory of Complex Systems (UvA) 6EC		