

Specialisations in the Master Computational Science 2024 - 2025										
Application domain	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
Computational Science Core	Machine Learning 1 (UvA) 6EC					Experimental Design and Data Analysis (VU) 6EC				Machine Learning for the Quantified Self (VU) 6EC
Computational Finance / Economics <i>Drona Kandhai</i>			Advanced topics in Computational Finance (UvA) 6EC			Scientific Computing (UvA) 6 EC		Computational Finance (UvA) 6EC		
			CED 1: Learning, Stability and Chaos (UvA) 5EC							
			Stochastic Simulation (UvA) 6EC							
			Stochastic Processes for Finance (UvA) 6EC							
Computational Biology <i>Jaap Kaandorp</i>	Bioinformatics Project (UvA) 6EC		Algorithms in Sequence Analysis (VU) 6EC					Bioinformatics Project(UvA) 6EC		
	Fundamentals of Bioinformatics (VU) 6EC							Bioinformatics for Translational Medicine (VU) 6EC		
Computational Biomedicine <i>Gábor Závodszy</i>	From Physics to Physiology (VU) 6EC					Parameter Estimation Applied to Medical & Biological Science (VU) 6EC		Biomolecular Simulations (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	
	Physics of Complex Systems: Dynamics and Chaos (UvA) 3EC								Advanced Computational Condensed Matter (UvA) 3EC	
High Performance Computing <i>Henri Bal</i>	Programming Large-scale Parallel Systems (VU) 6EC		Distributed Systems (VU) 6EC		High Performance Computing and Big Data (UvA) 6 EC					
					Parallel Programming Practical (VU) 6EC					
Computational Social Science <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>	Parallel Algorithms (UvA)** 8EC						Numerical Methods for Time-Dependent Partial Differential Equations (UvA)** 8 EC			
							Scientific Computing (UvA) 6EC			
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	