

Algorithm Design and Analysis				
Courses	Modules and ECTS			
	Module 1: Algorithms and complexity	Module 2: Knowledge representation and artificial intelligence	Module 3: Logic, mathematics and theoretical computer science	Module 4: Programming languages and verification
Algorithms in Graph Theory	3			
Algorithmic Geometry	3			
Approximation Algorithms	3			
Seminar in Algorithms	3			
Complexity Theory	3			
Heuristic Optimization Techniques	3			
Mathematical Programming	3			
Fixed-Parameter Algorithms and Complexity	3			
Structural Decompositions and Algorithms	3			
Parallel Algorithms	3			
Proof Theory 1			3	
Automated Deduction			6	
SAT Solving and Extensions		3		
VU Problem Solving and Search in Artificial Intelligence		3		
Complexity Analysis		3		
Total ECTS=48	30	9	9	