

Module MA-INF 1104	Advanced Algorithms				
Workload 270 h	Credit points 9 CP	Duration 1 semester	Frequency every year		
Module coordinator	Prof. Dr. Stefan Kratsch				
Lecturer(s)	Prof. Dr. Stefan Kratsch, Prof. Dr. Heiko Röglin				
Classification	Programme M. Sc. Computer Science		Mode Optional	Semester 1.	
Technical skills	Deeper insights into selected methods and techniques of modern algorithmics.				
Soft skills	Presentation of solutions and methods, critical discussion of applied methods and techniques.				
Contents	Advanced algorithmic techniques from e.g. approximation, randomized and exact exponential time algorithms. We will also revisit some essential topics such as linear programs and network flows.				
Prerequisites	none				
Format	Teaching format	Group size	h/week	Workload[h]	CP
	Lecture	60	4	60 T / 105 S	5.5
	Exercises	30	2	30 T / 75 S	3.5
	T = face-to-face teaching; S = independent study				
Exam achievements	Written exam (graded)				
Study achievements	Successful exercise participation (not graded)				
Forms of media					
Literature					