Module MA-INF 1210	**Probabilistic Analysis of Algorithms**				
Workload 180 h	**Credit points** 6 CP	**Duration** 1 semester	**Frequency** every year		
Module coordinator	Prof. Dr. Heiko Röglin				
Lecturer(s)	Prof. Dr. Heiko Röglin				
Classification	**Programme** M. Sc. Computer Science		**Mode** Optional	**Semester** 2. or 4.	
Technical skills	understanding of models and techniques for the probabilistic analysis of algorithms				
Soft skills	oral and written presentation of solutions and methods, abstract thinking				
Contents	smoothed and average-case analysis • simplex algorithm • local search algorithms • clustering algorithms • combinatorial optimization problems • multi-objective optimization				
Prerequisites	**Required**: None of the following modules have been passed: MA-INF 1213 – Randomized Algorithms and Probabilistic Analysis				
Format	**Teaching format**	**Group size**	**h/week**	**Workload[h]**	**CP**
	Lecture	60	2	30 T / 45 S	2.5
	Exercises	30	2	30 T / 75 S	3.5
	T = face-to-face teaching; S = independent study				
Exam achievements	Oral exam (graded)				
Study achievements	Successful exercise participation (not graded)				
Forms of media					
Literature	lecture notes, research articles				