Module MA-INF 1318	**Theoretical Aspects of Intruder Search**				
Workload 180 h	**Credit points** 6 CP	**Duration** 1 semester	**Frequency** every year		
Module coordinator	PD Dr. Elmar Langetepe				
Lecturer(s)	PD Dr. Elmar Langetepe				
Classification	**Programme** M. Sc. Computer Science	**Mode** Optional	**Semester** 1.		
Technical skills	To acquire fundamental knowledge on topics and methods in theoretical and algorithmic aspects of intruder search in geometric and discrete environments;				
Soft skills					
Contents	Intruder/Evader search in geometric and discrete environments, Fire-Fighter problem, Fire Control on graphs and in the plane, Man-and-Lion problem, Two-Guards problem, Search Games, Mobile and immobile hiders, Patrolling algorithms.				
Prerequisites	none				
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	Scientific research articles will be recommended in the lecture.				