

Module MA-INF 3203	Intelligent Information Systems				
Workload 180 h	Credit points 6 CP	Duration 1 semester	Frequency every year		
Module coordinator	Prof. Dr. Rainer Manthey				
Lecturer(s)	Prof. Dr. Rainer Manthey				
Classification	Programme M. Sc. Computer Science		Mode Optional	Semester 2. or 3.	
Technical skills	Students master the principles of management of derived data both theoretically and in practical systems development and application modeling. They are able to understand and classify the state-of-the-art in research in deductive databases.				
Soft skills	Communicative skills (oral/written presentation, “defending“ solutions), self-competence (time management, self-organisation, creativity), social skills (constructive discussion, sharing work in small teams)				
Contents	Syntax and semantics of deductive rules (views); efficient query processing in deductive DB; rule-based change management; IS design for rule-based applications				
Prerequisites	Recommended: Good knowledge of the foundations of SQL, predicate logic and set theory				
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	Written exam (graded)				
Study achievements	Successful exercise participation (not graded)				
Forms of media					
Literature	<ul style="list-style-type: none">• C. Zaniolo, S. Ceri et al.: Advanced Database Systems, Morgan Kaufmann, San Francisco/USA, 1997• E. Bertino, G. Zarri, B. Catania: Intelligent Database Systems, Addison Wesley, 2001				