TECHNISCHE UNIVERSITÄT KAISERSLAUTERN

Module Handbook

TUK MODHB Homepage

Course INF-22-34-K-6

Recent Developments for Data Models (4V+2U, 8.0 LP)

Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time / Self-Study
-	K	Lecture with exercise classes (V/U)	8.0 CP	156 h
4	V	Lecture		56 h
2	U	Exercise class (in small groups)		28 h
(4V+2U)			8.0 CP	84 h / 156 h

Basedata

SWS	4V+2U
CP, Effort	8.0 CP = 240 h
Position of the semester	1 Sem. irreg. SuSe
Level	[6] Master (General)
Language	[DE/EN] German or English as required
Lecturers	Deßloch, Stefan, Prof. Dr. (PROF | DEPT: INF)
Area of study	[INF-INSY] Information Systems
Livecycle-State	[NORM] Active

Possible Study achievement

- Verification of study performance: **proof of successful participation in the exercise classes (ungraded)**

Contents

- Object-oriented extensions of the relational model and SQL (user-defined types, object behavior)
- Support for multi-media data management
- Application access to object-relational extensions
- Implementing object behavior in SQL databases
- SQL extensions of data analysis and business intelligence applications
- Temporal data management
- Data streams and continuous queries
- Semi-structured data models and query languages (XML, JSON)
- Graph data models and query languages
- NoSQL: data models and query support

Literature

literature to be announced in the lecture.

Requirements for attendance (informal)

Fundamentals of Information Systems and Database Management Systems:

- Data Models, Database Design
- Query Languages (SQL)
- Host/Programming Language Coupling

Requirements for attendance (formal)

None

References to Course [INF-22-34-K-6]

Module	Name	Context	
[INF-22-34-M-6]	Recent Developments for Data Models	P: Obligatory	4V+2U, 8.0 LP
Course-Pool	**Name**		
[INF-INSY_V-KPOOL-6]	Lectures of the teaching area Information Systems		