

## Course

# DB2 - Data Base Systems 2

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### ^ General information

<b>Long name</b>	Data Base Systems 2
<b>Approving CModule</b>	<u>DB2_BaTIN</u>
<b>Responsible</b>	Prof. Dr. Andreas Behrend Professor Fakultät IME
<b>Level</b>	Bachelor
<b>Semester in the year</b>	summer semester
<b>Duration</b>	Semester
<b>Hours in self-study</b>	60
<b>ECTS</b>	5
<b>Professors</b>	NF Büchel
<b>Requirements</b>	Basic Course Mathematics Basic Course Computer Science Data Base Systems 1
<b>Language</b>	German
<b>Separate final exam</b>	Yes

## Final exam

### Details

Examination questions are programming of XML parser functions for generating insert- or update-commands, definition of a XML grammar using XML scheme, transformation of a UML class diagramm in a sequence of abstract data types, transformation of abstract data types in object-relational data types and in JSON types, insert- and delete-operations in Bayer trees.

### Minimum standard

Programming of a XML parser functions for generating an insert- or an update-commands,  
Transformation of an abstract data type in the scheme of a JSON type,  
An insert- or a delete-operation of a key in a Bayer tree.

### Exam Type

Examination questions are programming of XML parser functions for generating insert- or update-commands, definition of a XML grammar using XML scheme, transformation of a UML class diagramm in a sequence of abstract data types, transformation of abstract data types in object-relational data types and in JSON types, insert- and delete-operations in Bayer trees.

## ^ Lecture / Exercises

### Learning goals

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#### Knowledge

XML Grammar with XML scheme  
abstract data types  
object oriented data bases  
object relational data bases  
NoSQL data bases  
Bayer trees

### Expenditure classroom teaching

Type	Attendance (h/Wk.)
Lecture	2
Exercises (whole course)	0
Exercises (shared course)	2
Tutorial (voluntary)	0

### Separate exam

none

## ^ Practical training

### Learning goals

## Skills

Definition of XML schemes, of abstract data types, of data types in object-relational data bases. Programming of CRUD Operations on object-relational data bases and on NoSQL data bases. Validating parsing of JSON documents.

## Expenditure classroom teaching

Type	Attendance (h/Wk.)
Practical training	1
Tutorial (voluntary)	0

## Separate exam

none