### Module title
Data Management and Analysis  
**Abbreviation**: 12-DM-F-202-m01

### Module coordinator
holder of the Junior Professorship of Information Management

### Module offered by
Faculty of Business Management and Economics

### ECTS
<table>
<thead>
<tr>
<th>5</th>
<th>numerical grade</th>
</tr>
</thead>
</table>

### Method of grading
Only after succ. compl. of module(s)

### Duration
<table>
<thead>
<tr>
<th>1 semester</th>
<th>undergraduate</th>
</tr>
</thead>
</table>

### Other prerequisites
--

### Contents
The module covers the fundamentals and concepts of data modelling as well as languages for creating and querying data bases.

Main topics:
- Fundamentals and application of semantic data modelling  
- Fundamentals and application of the relational data model  
- Fundamentals and application of data query languages  
- Further aspects of data modelling

### Intended learning outcomes
Upon completion of the module students are able
(i) to design good conceptual and logical data models;  
(ii) to transform conceptual data models into physical data schemas;  
(iii) to create and update databases and tables;  
(iv) to formulate complex database queries;  
(v) to design different applications with databases.

### Courses
(type, number of weekly contact hours, language — if other than German)
V (2) + Ü (2)

### Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) Written examination (approx. 60 minutes) or  
b) term paper (approx. 15 pages) or  
c) term paper (approx. 10 pages) and presentation (approx. 10 minutes); (weighted 2:1) or  
d) oral examination (groups of up to 3; approx 10 minutes per candidate)

Language of assessment: German and/or English  
creditable for bonus

### Allocation of places
50 places.
1. No restrictions with regard to available places for Bachelor’s students of Wirtschaftsinformatik (Business Information Systems) (BSc with 180 ECTS credits).
2. Additional places will be allocated to students of other subjects provided there is enough capacity. These additional places will be allocated by lot among all applicants irrespective of their subjects.
3. Places on all courses of the module with a restricted number of places will be allocated in the same procedure.  
4. A waiting list will be maintained and places re-allocated by lot as they become available.

### Additional information
--

### Referred to in LPO I
(examination regulations for teaching-degree programmes)
--

### Module appears in
<table>
<thead>
<tr>
<th>Degree and Specialization</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor' degree (1 major) Business Management and Economics</td>
<td>2015</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Economathematics</td>
<td>2015</td>
</tr>
<tr>
<td>Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor)</td>
<td>2015</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Economathematics</td>
<td>2017</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Business Management and Economics</td>
<td>2019</td>
</tr>
<tr>
<td>Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor)</td>
<td>2019</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Business Information Systems</td>
<td>2020</td>
</tr>
<tr>
<td>Master's degree (1 major) China Business and Economics</td>
<td>2021</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Business Information Systems</td>
<td>2021</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Economathematics</td>
<td>2021</td>
</tr>
<tr>
<td>Bachelor' degree (1 major) Business Management and Economics</td>
<td>2021</td>
</tr>
<tr>
<td>Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor)</td>
<td>2021</td>
</tr>
</tbody>
</table>