

## Module description

Module title  Data Management and Analysis					Abbreviation	
					12-DM-F-262-m01	
Modul	e coord	inator		Module offered by		
holder	of the	Chair of Business Analytics		Faculty of Management and Economics		
ECTS	Meth	od of grading	Only after succ. cor	Only after succ. compl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites	,		
1 seme	ester	undergraduate				
Conter	nts					

The module teaches on the one hand basics and concepts of modeling data and querying and manipulating databases. Additionally, fundamentals of data analysis as well as data analysis processes are introduced.

#### Focal points are:

- Fundamentals and application of semantic data modelling
- Fundamentals and application of the relational data model
- · Fundamentals and application of data query languages
- Hypothesis-driven and model-building data analysis
- Data analysis processes and their comparison
- Supervised and unsupervised learning processes

#### **Intended learning outcomes**

Upon completion of the module students are able

- to design good conceptual and logical data models;
- to transform conceptual data models into physical data schemas;
- to formulate complex database queries;
- to design different applications with databases
- perform and interpret hypothesis testing on real data
- understand the basics of supervised and unsupervised machine learning

 $\textbf{Courses} \ (\textbf{type, number of weekly contact hours, language} - \textbf{if other than German})$ 

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Module taught in: German and/or English

**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 to 120 minutes) or
- b) portfolio (approx. 50 hours total)

Language of assessment: German and/or English

creditable for bonus

#### Allocation of places

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#### **Additional information**

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#### Workload

150 h

#### **Teaching cycle**

Teaching cycle: summer semester

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

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### Module appears in



# Module description

Studiengang zugeord	

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