

Module title		Abbreviation
Data Management and Analysis		12-DM-F-242-m01
Module coordinator		Module offered by
holder of the Chair of Business Analytics		Faculty of Business Management and Economics
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>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.</p> <p>Focal points are:</p> <ul style="list-style-type: none"> • 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		
<p>Upon completion of the module students are able</p> <ul style="list-style-type: none"> • 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 		
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)		
<p>a) written examination (approx. 60 minutes) or b) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or c) portfolio (approx. 20 hours) creditable for bonus</p>		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Business Information Systems (2024)		

Bachelor' degree (1 major) Economathematics (2024)

Bachelor' degree (1 major) Business Management and Economics (2024)

Bachelor's degree (1 major, 1 minor) Business Management and Economics (Minor, 2024)