



1.	<b>Course title</b>	Management of Databases
2.	<b>Course code</b>	ITMW07
3.	<b>Semester</b>	9
4.	<b>Unit offering the course</b>	Faculty of Computer Science and Engineering
5.	<b>ECTS</b>	6
6.	<b>Goals of the study programme</b>	
	The aim of the course is to acquaint the student with the field of databases and information systems and to train him to lead projects for development of databases, as well as to lead the maintenance of the existing solutions using databases. Competencies that the student is expected to acquire after completing the course:- to understand the basic concepts embedded in modern database management systems- to understand the importance of databases for the modern way of doing business- to understand the general role of databases and their role in building business information systems- to know how to model and implement a database according to real-world requirements- to know how to manage existing database management systems- to be able to analyze and critique existing solutions using databases	
7.	<b>Contents of the study programme</b>	
	Topics covered within this course:- Modern database management systems.- Process of data modelling and its importance for successful development and implementation of information systems; - Object-oriented models, relational models, network models, graph-oriented models and other models.- SQL - language and standard for working with relational databases.- Architecture of business information systems and the importance of databases in those systems; distributed systems and distributed databases.- Data security in database systems; transaction processing and database competitiveness.- Data confidentiality in database systems - backup and recovery;- Analytical reports and support for strategic management and planning; data models for data analysis; multidimensional data analysis and OLAP- Overview of the most important features of database management	



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	<p>systems; specific functionalities and extensions.- Overview of the most important commercial and free database management systems.- Criteria for selection of database management systems in companies.</p>
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