Course Unit Descriptor

Study Programme: Engineering management			
Course Unit Title: Business Intelligence			
Course Unit Code: DAS045			
Name of Lecturer(s): Full professor Biljana Radulovic, PhD; Assistant professor Zoltan Kazi, PhD			
Type and Level of Studies: Bachelor Academic Degree			
Course Status (compulsory / elective): Compulsory			
Semester (winter / summer): Winter			
Language of instruction: English			
Mode of course unit delivery (face-to-face / distance learning): Face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: None			
Course Aims: Enabling students to apply techniques of database schema design at the conceptual level. At a practical level, students will acquire knowledge about techniques for querying and presenting the results with complex databases, data warehouse systems, business intelligence tools and data mining.			
Learning Outcomes: Mastering the techniques and methods of data modeling and analysis within data warehouse systems, with special emphasis on decision support systems and business intelligence tools.			
Syllabus: *Theory* Data Warehouse - a complex database. Decision support systems. Comparison of operational data. Time interval. Multidimensionality data. Design schemes stars and snowflakes schemes - Identification of user requirements. Logical design. Extraction of operative data. Generating queries and design of Data Mining System. Extensions in SQL standard – DataCube. *Practice* Student should master the techniques in database schemas design, query and update a database in a Data Warehouse environment.			
Required Reading: 1. Ciric Bojan: Business intelligence, Data Status, 2006.			
Weekly Contact Hours: 3	**Lectures:** 2	**Practical work:** 1	
Teaching Methods: Lectures and students group work			
Knowledge Assessment (maximum of 100 points): 100			

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	oral exam	30
Practical lab work	60		