VIDZEMES AUGSTSKOLA

FACULTY OF SOCIETY AND SCIENCE
STUDY COURSE DESCRIPTION

Course Title:	**Data Driven Business Management**			
Course code (LAIS):				
Study programme:				
Level of Study programme:	☐	1st level professional higher education		
	☐	Professional Bachelor		
	☒	Professional Master		
	☒	Academic Master		
	☐	PhD level		
Type of Study programme:	☐	Compulsory course (Part A)		
	☐	Professional specialization courses (Part B, compulsory)		
	☒	Professional specialization optional courses (Part B, optional)		
	☐	Elective courses (Part C)		
Course Workload:	**ECTS**	**Academic hours**	**Contact hours**	**Independent work hours**
	3	75	24	51
Course Author/ Tutor:	**Santa Lemsa**			
	Guest docent, Santa Lemsa, Dr.oec., Mg.math.			
	e-mail: santa.lemsa@va.lv			
	Consultation: according to the schedule for each semester			
Study Form:	Full time studies			
Study year, semester:	Year 1, Semester 2			
Language:	English or Latvian			
Prerequisites for the Course:	Basic knowledge in business management			
Course Summary:	The purpose of the course is to provide a comprehensive introduction to the principles and practices of data-driven business management, offering participants the tools and knowledge needed to leverage data for enhanced decision-making and business performance. The course covers essential aspects of data management, including GDPR compliance, data sources, formats, storage, and the creation of data libraries that serve as the foundation for business operations. Participants will explore how to effectively implement business analysis and monitoring systems, understanding the necessary infrastructure, tools, skills, and teams required for success. The course also introduces advanced tools such as data mining, data visualization platforms, and machine learning/AI technologies. Through real-world case studies and hands-on exercises, students will learn how to design and implement daily, monthly, and quarterly monitoring systems, analyze business processes, and provide actionable recommendations for financial and operational improvements. This course is ideal for professionals aiming to optimize business performance through data-driven insights and innovative analytics strategies.			
Study course methods:	Lectures, workshops, individual and group works, independent work with data, tests, development of an analytical project.			
Assessment:	The summed assessment, which is formed from the assessments of the work performed during the acquisition of the study material (70%) and the exam (30%): Assessment 1. Analytical project development (individually): 50 % Assessment 2. Summative assessment of tests and involvement during the course (individually): 20% Final exam presentation: 30% The course is graded in 10-points scale where: with distinction (10) - knowledge, skills and competence exceed the requirements of the course; excellent (9) - knowledge, skills and competences fully meet the requirements of the course; very good (8) - the requirements of the course are fully met, however, in some issues there is not a deep enough understanding to use the knowledge independently in solving more complex problems;			

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<tr><td></td><td colspan="2">good (7) - the requirements of the course are generally met, however, in some cases there is an inability to use the acquired knowledge independently;
almost good (6) - the requirements of the course have been met, however, at the same time there is a lack of deep understanding of the problem and inability to use the acquired knowledge;
satisfactory (5) - in general, the requirements of the course have been acquired, however, insufficient knowledge of some problems and inability to use the acquired knowledge can be established;
almost satisfactory (4) - in general, the requirements of the course have been mastered, however, there is an insufficient understanding of some basic concepts, there are significant difficulties in the practical application of the acquired knowledge;
weak (3) - knowledge is superficial and incomplete, the student is not able to use it in specific situations;
poor (2) - there is superficial knowledge only about certain problems, most of the course requirements have not been mastered;
very poor (1) - no understanding of the basic problems of the course, almost no knowledge of the topics covered in the course.</td></tr>
<tr><td>Requirements for Credits:</td><td colspan="2">In order to receive the final grade, all requirements (deliverables) must be met. Failure to meet the submission deadlines will result in a downgrade.</td></tr>
<tr><td>Abiding by the Academic Ethics</td><td colspan="2">Students must abide by the academic and research ethics, Vidzeme University of Applied Sciences Ethics Regulations, incl.:
– study papers must be independently developed;
– the study work should reference all statements, ideas and data used that have been authored by someone else;
– appropriate data acquisition methods should be used in the acquisition of data, the research ethics must be respected, empirical data must be collected independently and cannot be distorted or falsified;
– the examination must be carried out by the student independently, without the use of supporting materials and/or consultations with other students, unless the lecturer states otherwise.
In the event of non-compliance with the academic and research ethics, punishment is imposed in accordance with the ViA Ethics Regulations and the study course must be re-taken, unless the punishment is extramarital.</td></tr>
<tr><td rowspan="9">Learning Outcomes; the evaluation methods and criteria</td><td>Learning Outcomes</td><td>The evaluation methods and criteria</td></tr>
<tr><td colspan="2">Knowledge</td></tr>
<tr><td>In depth knowledge on data management, tools for data analytics</td><td>Lectures, practical work, tests, workshops</td></tr>
<tr><td>In depth knowledge on business monitoring, process analysis and impact analysis.</td><td>Lectures, practical work, tests, workshops</td></tr>
<tr><td colspan="2">Skills</td></tr>
<tr><td>Skills to perform business analysis and to link monitoring outcome to product/portfolio/process/KPI’s</td><td>Lectures, practical work, teamwork, project</td></tr>
<tr><td>Skills to use data analytics tools, to identify data type, interpret GDPR</td><td>Lectures, practical work, teamwork, project</td></tr>
<tr><td colspan="2">Competency</td></tr>
<tr><td>Competency to develop business monitoring, take data driven decisions, and to understand the impact of changes to business.</td><td>Practical work, teamwork, project</td></tr>
<tr><td>Competency to analyse product, portfolio, process for the upcoming year, forecasts and compare Planned vs Actual</td><td>Practical work, teamwork, project</td></tr>
<tr><td>Course Compulsory literature:</td><td colspan="2">1. Thomas H. Davenport, Jeanne G. Harris, 2017; Competing on Analytics: Updated with a New Introduction. The New Science of Winning
2. Anil Maheshwari, 2015; Data Analytics Made Accessible</td></tr>
<tr><td>Course additional</td><td colspan="2">https://gdpr-info.eu/</td></tr>
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literature:	https://www.microsoft.com/en-us/power-platform/products/power-bi/learning
Course confirmation date:	
Date of course description update:	-

Study Course Plan:

Date*	Theme	Academic hours		Study Form/ Organization of independent work of students and task description
		Contact hours	Independent work hours	
1	Data management (incl insight in GDPR, data sources, data formats, data storage, data library)	4	5	Lecture. Discussion.
2	Business analysis & monitoring: - what does it mean?, - what does it requires to implement?, - infrastructure (tools, people, skills)	4	5	Lecture. Discussion. Workshop.
3	Introduction to tools – data mining, data visualization, analytical platforms, ML/AI tools	4	5	Lecture. Discussion. Test
4	Business analysis (specific company data used): 1.Setup of daily/monthly/quarterly monitoring of operation (incl KPI's) – each table/visualizations is described – what it tells, why it is important to monitor it, what decision can be taken based on it. 2.Process analysis with recommendations to business and impact on business calculations (financial, costs, optimization). 3.Product/portfolio analysis with recommendations to business and impact on business calculations	10	20	Lecture. Workshop. Presentation and explanation of results
5	Exam – presentation	2	15	Development and presentation of monitoring and impact analysis on business
6				
7				
8				
9				
	Hours total:	***24***	***51***	

** The date is specified before the implementation of the course*