



**DATA ANALYSIS AND BUSINESS MODELLING**

<b>Credit points</b>	4 CP		
<b>Duration of the course</b>	2 sem. (study programme 90 CP) / 3 sem. (study programme 120 CP)		
<b>Study course annotation</b>	The course introduces students to the most popular methods in business process modelling and the range of modern business process modelling tools. During the course students gain knowledge on how to develop business process models and their change proposals, how to implement changes at the level of business process model and how to use business process models to determine the requirements for information systems and services that support them		
<b>Aim of the study course</b>	The aim of the course is to prepare students for the following tasks: business process modelling, business process analysis, definition of information systems and service requirements based on detailed business process models, as well as familiarisation with various business process modelling languages and tools.		
<b>Study course results</b>	<b>Knowledge</b>	<b>Skills</b>	<b>Competences</b>
	Upon successful completion of this study course, students: <ul style="list-style-type: none"> <li>• know how to use business modelling software to model business processes</li> <li>• understand how to create business modelling using business process description standards and methodologies</li> <li>• know the use of business process modelling for specific tasks</li> </ul>	Students: <ul style="list-style-type: none"> <li>• know how to use specialised computer programs according to work tasks</li> <li>• know how to prepare a business process model</li> <li>• are able to systematise and analyse financial information</li> <li>• know how to evaluate the correctness of the prepared business model</li> </ul>	Students are able to: <ul style="list-style-type: none"> <li>• use quantitative and qualitative analysis methods</li> <li>• summarise the results of financial analysis in decision-making</li> <li>• use information technology and application programs to perform work tasks</li> <li>• apply their knowledge in practical activities</li> <li>• independently integrate, synthesise and critically evaluate information from different sources, solve problems using a logical and systematic approach</li> </ul>
<b>Study course content</b>	<b>Topics</b>		
	1	Introduction to business process theory	
	2	Organization activity system analysis	
	3	Basic concepts of business process improvement	
	4	Process improvement organization	
	5	Company structuring and organization activity description	
	6	Business process selection and ranking	
	7	Typical business processes and management functions	
	8	Business process modelling and description technology	
9	Business process description standards and methodology		



	10	Business process optimization methods
	11	Business modelling software
<b>Form of assessment:</b>	Exam	
<b>Obligatory literature:</b>		
1. Adam J. Bock. <i>The Business Model Book: Design, build and adapt business ideas that drive business growth.</i> Pearson Business 2017-12-15. 293 pages		
2. Osterwalder, Y. Pigneur. <i>Business Model Generation.</i> Published by John Wiley & Sons. 2010. 282 pages.		
<b>Additional literature:</b>		
Gerardus Blokdyk. <i>Business Process Modelling A Complete Guide.</i> Emereo Pty Limited, 2019. 314 pages		
<b>Other sources of information:</b>		
1. <i>The Econometrics Journal.</i> Wiley Online Library. Retrieved from <a href="http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1368-423X">http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1368-423X</a>		
2. Eurostat. <i>Your key to European statistics. Database.</i> <a href="http://ec.europa.eu/eurostat/data/database">http://ec.europa.eu/eurostat/data/database</a>		
3. BIA library electronic database ( <a href="http://www.bsa.edu.lv">www.bsa.edu.lv</a> ):		
4. EBSCO (ENG): <a href="http://search.ebscohost.com">http://search.ebscohost.com</a>		
5. Science Direct (ENG) <a href="https://www.sciencedirect.com/science/article/abs">https://www.sciencedirect.com/science/article/abs</a>		
Changes and additions to the program and literature list are possible during the study process		