UNIVERSITY OF ECONOMICS - VARNA
MASTER DEGREE CENTER
DEPARTMENT OF INFORMATICS

ACCEPTED BY:

Dean:

(prof. Vladimir Sulov, PhD)

SYLLABUS

SUBJECT: "BUSINESS PROCESS MODELING"

DEGREE PROGRAMME: „Computer Science"; MASTER`S DEGREE

YEAR OF STUDY: 5 for same field graduates; 6 for other field graduates;

SEMESTER: 10 for same field graduates, 12 for other field graduates;

TOTAL STUDENT WORKLOAD: 210 hours; incl. curricular 60 hours

CREDITS: 7

DISTRIBUTION OF STUDENT WORKLOAD ACCORDING TO THE CURRICULUM

TYPE OF STUDY HOURS	WORKLOAD, hours	TEACHING HOURS PER WEEK, hours
CURRICULAR: incl.		
• LECTURES	30	2
• SEMINARS / LAB. EXERCISES	30	2
EXTRACURRICULAR	150	-

Prepared by:

1. …………………………………..
   (assoc.prof. Silvia Parusheva, PhD)

2. ……………………………………
   (chief assist.prof. Yanka Aleksandrova, PhD)

Head of department
of Informatics: ……………`…………………………….…
   (prof. Julian Vasilev, PhD)

I. ANNOTATION

Business process modeling is an essential component of business process analysis and improvement efforts. It is also a key activity in information systems development, especially in modern e-business systems. In this context, the course is designed to provide the students with some of the fundamental concepts of business process modeling, such as the importance of modeling, the process of building models, the methods, tools and techniques used in this process, etc.

Expected results: understand the benefits of business process modeling; identify the components of business processes; in-depth understanding of thebusiness process modeling methods; practical skills inusing modeling tools; acquaint with some best practices in the field.

II. THEMATIC CONTENT

№	TITLE OF UNIT AND SUBTOPICS	NUMBER OF HOURS		
		L	S	L.E.
Theme 1. BASIC CONCEPTS OF BUSINESS PROCESS MODELING (BPM)		**6**		
1.1.	Need, relevance and importance of BPM.	2		
1.2.	Essence and basic characteristics of BPM. Relationship with other concepts.	4		
Theme 2. BUSINESS PROCESSES		**6**	**3**	
2.1.	Elements of business processes. Workflows.	2	1	
2.2.	Process management life cycle. Classification.	2	1	
2.3.	Discovering business processes. As-is vs to-be processes.	2	1	
Theme 3. BUSINESS PROCESS MANAGEMENT SYSTEMS		**6**	**3**	
3.1.	Implementing business processes.	3	2	
3.2.	Managing business processes.	3	1	
Theme 4. BUSINESS PROCESS MODELING METHODS		**2**		
4.1.	Various approaches to BPM.	1		
4.2.	Classification of modeling methods.	1		
Theme 5. BUSINESS PROCESS MODELING WITH BUSINESS PROCESS MODEL AND NOTATION (BPMN)		**4**	**10**	
5.1.	Advantages and core concepts regarding BPMN.	2	4	
5.2.	Elements and rules of BPMN.	4	6	
Theme 6. BUILDING BUSINESS PROCESS MODELS		**6**	**14**	
6.1.	Techniques for gathering information about business processes	2	4	
6.2.	Definition of a business area. Stages in the development of the modeling project.	2	5	
6.3.	Case studies.	2	5	
	Total:	**30**	**30**	

III. FORMS OF CONTROL:

№	TYPE AND FORM OF CONTROL	Number	extracur-ricular, hours
1.	**Midterm control**		
1.1.	Course project	1	50
1.2.	Presentation on a hot topic of BPM	1	40
	Total midterm control:	**2**	**90**
2.	**Final term control**		
2.1.	Test (open and/or closed questions)	1	60
	Total final term control:	**1**	**60**
	Total for all types of control:	**3**	**150**

IV. LITERATURE

REQUIRED (BASIC) LITERATURE:
1. Desfray, Ph. and Raymond, G. Modeling Enterprise Architecture with TOGAF. Elsevier Inc., 2014.
2. Dumas, M. et al. Fundamentals of BPM, second edition. Springer, 2018.
3. Filipova, N. Conceptual Architecture of Business Process Management Systems. Izvestiya, 2013, issue 2, pages 43-54.

RECOMMENDED (ADDITIONAL) LITERATURE:
1. McKinty, C., Mottier, A., Designing Efficient BPM Applications: A Process-Based Guide for Beginners, O'Reilly Media, 2016.
2. Silver, B., BPMN Quick and Easy Using Method and Style: Process Mapping Guidelines and Examples Using the Business Process Modeling Standard, Cody-Cassidy Press, 2017.
3. Fawzy, A., Business Analysis And Process Modeling: A Beginner's Guide To Business Strategy And Process Improvement, Idea For IT Press, 2018.