

1.	Course	<i>Business intelligence</i>		
2.	Code	KNI_E7		
3.	Study programme	Computer Science and Engineering PhD study programme		
4.	Study programme organized by	FCSE		
5.	Cycle	Third – PhD		
6.	Academic year / semester winter/summer/elective	7. ECTS credits 7,5		
8.	Teacher	Prof. d-r Andrea Kulakov		
9.	Prerequisites	None		
10.	Course programme goals (competences): Enabling the students to analyze and design business intelligence algorithms and apply them in solving problems that occur in the modern company environment. The student will be capable to use business intelligence algorithms for solving real problems.			
11.	Course syllabus: The course provides understanding of the way people from the business world use information and the reasons behind those approaches. The main channels and business information sources as well as the value and benefits of information, information technologies and artificial intelligence as services to the business world. The following topics will be considered: IT and business strategies, understanding business intelligence in the global world, corporate data warehouse generators, modern leading tools in business intelligence, software and network business intelligence, IT enabled processes and entrepreneurship resource planning, logistics management with IT, user support management and business intelligence, managing the business achievements using IT, business intelligence in e-commerce, business intelligence in commerce and industry, Lean Six Sigma methodology for business process improvements and its relationship to business intelligence, managing and organizing an efficient business intelligence team.			
12.	Teaching methods: Classes supported with slide presentations, interactive teaching, lab equipment and other software packages, teamwork, case studies, invited guest lecturers, presentations of project works, e-learning materials, forums and consultations.			
13.	Total fund of work hours	7,5 EKTC x 30 h = 225 h		
14.	Available hours distribution	45+30+150 = 225		
15.	Teaching activities	15.1.	Theoretical classes	45 h
		15.2.	Practical classes (labs, exercises), seminars, team work	30 h
16.	Other activities	16.1.	Project tasks	50 h
		16.2.	Self study	50 h
		16.3.	Homework	50 h
17.	Grading			
	17.1.	Tests	40 points	
	17.2.	Seminar work/ project (presentation: written and oral)	50 points	

17.3.	Active participation				10 points	
18.	Grading criteria (points/grade)		to 59 points		5 (five) (F)	
			from 60 to 68 points		6 (six) (E)	
			from 69 to 76 points		7 (seven) (D)	
			from 77 to 84 points		8 (eight) (C)	
			from 85 to 92 points		9 (nine) (B)	
			from 93 to 100 points		10 (ten) (A)	
19.	Conditions for attending the final exam	Successful completion of activities 15.1 and 15.2				
20.	Language	Macedonian or English				
21.	Quality assessment	Internal evaluation and student pools				
22.	Literature					
	22.1.	Compulsory				
		No.	Author	Title	Publisher	Year
		1.	Stephen Haag, Maeve Cummings, Amy Phillips	Management Information Systems for the Information Age (6th Edition)	China Machine Press	2006
		2.	Efraim Turban, Jay E. Aronson, Ting-Peng Liang, Ramesh Sharda	Decision Support and Business Intelligence Systems (8th Edition)		2006
		3.		Selected recent journal and conference papers		
	22.2.	Additional				
		No.	Author	Title	Publisher	Year
		1.				
		2.				
	3.					