1.	Course title	**Engineering ERP business systems**	
2.	Course code	SI-I-13	
3.	Study program	**Software engineering**	
4.	Unit offering the course	**FCSE**	
5.	Undergraduate/master/PhD	**Master**	
6.	Year/semester 2/summer/elective	7. ECTS: **6**	
8.	Teacher(s)	assist. prof. d-r Ivan Chorbev, assoc. prof. d-r Ljupco Antovski, assoc. prof. d-r Dejan Gjorgjevikj	
9.	Course prerequisites	None	
10.	Goals (competences): After the completion of the course, the students are expected to understand the key elements of software modelling of business processes within an integrated and logical way in business systems. The students should demonstrate practical understanding of business system integration and its use in the context of modern business environment. They should be able to summarise the functions of Enterprise Resource Planning – ERP systems. They should be able to explain the business and technical conditions that resulted in the need of ERP systems. They should be able to evaluate commercial ERP systems in order to determine whether they satisfy business needs. To be able to compare the logical, technological and organisational architecture of such systems. The students should show knowledge of the structure, modules and functionalities in ERP systems.		
11.	Course content: Modules of ERP systems, functions of ERP systems. Concepts behind the modules and functionalities. Planning and implementation of ERP systems from a user perspective, but also an author overview. Technologies used. Commercially available ERP systems. Open source systems. The SAP system. The OpenERP system. The Microsoft AX system. Modules for manufacturing, warehousing, sales and marketing, human resources, finance, accounting, procurement.		
12.	Teaching methods: Lectures supported by slide presentations, interactive lectures, trainings (using lab equipment and software packages), team work, case studies, invited guests and lectures, individual practical assignments presentations, seminar paper, e-learning (forums, consultations).		
13.	Total available time	6 ECTS x 30 hours = 180 hours	
14.	Distribution of the available time	60 + 0 + 120 = 180 hours	

15.	Teaching activities	15.1.	Lectures	60 hours
		15.2.	Training (labs, problem solving), seminar and team work	0 hours
16.	Other activities	16.1.	Project work	40 hours
		16.2.	Self study	40 hours
		16.3.	Home work	30 hours

17.	Grading		
	17.1.	Tests	65 points
	17.2.	Seminar work/project (written or oral presentation)	25 points

			to 59 points	5 (five) (F)
			from 60 to 68 points	6 (six) (E)
18.	Grading criteria		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)

17.3.	Active participation	10 points

19.	Final exam prerequisites	Successfully completed activities 15.1 and 15.2
20.	Course language	Macedonian and English
21.	Quality assurance methods	Internal evaluation and student questionnaires

22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	Mary Sumner	Enterprise Resource Planning	Pearson Prentice Hall	2005
		2.	Luvai F. Motiwalla, Jeffrey Thompson	Enterprise systems for management	Pearson Education Inc.	2009
		3.				
	22.2.	Additional				
		No.	Authors	Title	Publisher	Year
		1.				
		2.				
		3.				