1.	Course Title	Mobile Information Systems		
2.	Code	F18L3W128		
3.	Study program	Software engineering and information systems		
4.	Study Program Organizer	Faculty of Computer Science and Engineering		
5.	Degree (first, second, third cycle)	first cycle		
6.	Academic year / semester 4 / winter / optional	7. ECTS credits 6		
8.	Teacher	full professor Vladimir Trajkovikj, assistant professor Petre Lameski		
9.	Course enrollment prerequisites	Алгоритми и податочни структури		
10.	Course program goals (competencies): After finishing this course, the user is expected to have broadened knowledge in the application of technologies and data storage, acquisition and processing tools in distributed and ubiquitous environment on different mobile platforms.			
11.	Course program content: Integration of mobile applications with information systems. Ubiquitous devices and services. Development of mobile applications for multiple platforms. Communication technologies in mobile applications. Near distance communication technologies. Integration with databases. Integration of mobile applications with cloud based solutions. Data processing in mobile applications.			
12.	Learning methods: Lectures using presentations, interactive lectures, exercises (using equipment and software packages), teamwork, case studies, invited guest lecturers, independent preparation and defense of a project assignment and seminar work.			
13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	30 + 45 + 15 + 15 + 75 = 180 hours		
15.	Teaching activity forms	15.1.	Lectures – theoretical teaching	30 hours
		15.2.	Exercises (laboratory, auditory), seminar papers, teamwork	45 hours
16.	Other activity forms	16.1.	Project Tasks	15 hours

		16.2.	Independent Learning Tasks	15 hours
		16.3.	Home learning	75 hours
17.	Assessment methodology			
	17.1.	Tests		10 points
	17.2.	Seminar paper/project (presentation: written and oral)		10 points
	17.3.	Activity and learning		10 points
	17.4.	Final exam		70 points
18.	Assessment criteria (points/grade)		up to 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Course completion and final exam requirements		Realized activities 15.1 and 15.2	
20.	Teaching Language		Macedonian and English	
21.	Teaching quality evaluation method		Internal evaluation mechanisms and questionnaires	
22.	Course Material			
	22.1.	Mandatory course material		

	No.	Author	Title	Publisher	Year
	1	Gaurav Saini	Hybrid Mobile Development with Ionic: Building highly interactive mobile apps	Packt	2017
	2	Ivo Salmre	Writing Mobile Code: Essential Software Engineering for Building Mobile Applications: Essential Software Engineering for Building Mobile Applications	Addison-Wesley	2005
	3	Greg Shackles	Mobile Development with C#: Building Native iOS, Android, and Windows Phone Applications	O'Reilly	2012

22.2. Additional course material

No.	Author	Title	Publisher	Year