

Add. 3		Course program for the first, second and third level (cycle) of studies				
1.	Course title	Software Engineering				
2.	Code	296				
3.	Study group(s)	Mechatronics				
4.	The organizer of the study program (unit, institute, department)	Faculty of Mechanical Engineering - Skopje				
5.	Level (first, second, third)	First				
6.	Academic year / semester	Third / summer	7.	ECTS credits	6	
8.	Instructor	Dushan Chakmakov				
9.	Prerequisites	Structured Programming				
10.	Course objectives (competences): Introduction to elements of software development and object-oriented programming using Java.					
11.	Course content: Introduction to software maintenance. Procedural and object-oriented programming. Java programming: basics, windows, graphics and animation. Java applets and scripts.					
12.	Study methods: lectures, laboratory practice, project assignments, individual assignments, self-learning					
13.	Total hours	6 ECTS x 30 hours = 180 hours				
14.	Hours allocation per activity:	30 + 30 + 30 + 30 + 60				
15.	Lectures/Lab	15.1.	Lectures	30		
		15.2.	Lab (student work)	30		
16.	Project Work/Assignments	16.1.	Project assignments	30		
		16.2.	Individual assignments	30		
		16.3.	Self-learning	60		
17.	Points/Marks:					
	17.1.	Tests(1 x 50 points)			50 points	
	17.2.	Projects			40 points	
	17.3.	Attendance			10 points	
18.	Grading scale	Under 50		5 (five) (F)		
		50-59 points		6 (six) (E)		
		60- 69points		7 (seven) (D)		
		70 -79points		8 (eight) (C)		
		80-89points		9 (nine) (B)		
		90- 100 points		10 (ten) (A)		
19.	Prerequisites for taking the final exam	/				
20.	Language of Instruction	Macedonian				
21.	Course evaluation	Student questionnaire				

22.	Textbooks				
	22.1.	Instruction materials			
No.		Author	Title	Publisher	Year
1.		Chakmakov D.	Lectures and Exercises (the faculty WEB site)	www.mf.edu.mk	2007
2.					
22.2.	Supplemental Instruction Materials				
	No.	Author	Title	Publisher	Year
	1.	Marty Hall, Larry Brown	Core Web Programming	SunMicrosystem /Prentice Hall	2006