

Add. 3		Course program for the first, second and third level (cycle) of studies				
1.	Course title	Medical Engineering				
2.	Code	194				
3.	Study group(s)	PInf.				
4.	The organizer of the study program (unit, institute, department)	Faculty of Mechanical Engineering - Skopje, Ss. Cyril and Methodius University in Skopje				
5.	Level (first, second, third)	First				
6.	Academic year / semester	summer	7.	ECTS credits	6	
8.	Instructor	Prof D-r Ljuben Dudeski Prof D-r Jasmina Caloska				
9.	Prerequisites	N/A				
10.	Course objectives (competences): Introduction to technical equipment and software support in medical operations.					
11.	Course content: Historical development of medical engineering. Equipment and software support in medical diagnosis. General methods and equipment for medical diagnostics (ECG, ambulatory blood pressure, ambulatory ECG stress test). Methods and equipment for medical ultrasound diagnostic. Systems for monitoring the patient's condition. Laboratory tests in medicine. Physical therapy techniques and equipment. Computer aided design of orthopedic devices. Information systems in medical operations. Advanced techniques in medical engineering.					
12.	Study methods: Interactive lectures, exercises auditory and / or laboratory, individual and / or team working on project assignments, self-study.					
13.	Total hours	6 ECTS x 30 hours = 180 hours				
14.	Hours allocation per activity:	30 + 30 + 30 + 30 + 60 = 180 hours				
15.	Lectures/Lab	15.1.	Lectures	30 hours		
		15.2.	Lab (student work)	30 hours		
16.	Project Work/Assignments	16.1.	Project assignments	30 hours		
		16.2.	Individual assignments	30 hours		
		16.3.	Self-study	60 hours		
17.	Points/Marks:					
	17.1.	Tests	70 points			
	17.2.	Projects	20 points			
	17.3.	Attendance	10 points			
18.	Grading scale	Under 50		5 (five) (F)		
		51 - 60 points		6 (six) (E)		
		61 - 70 points		7 (seven) (D)		
		71 - 80 points		8 (eight) (C)		
		81 - 90 points		9 (nine) (B)		
		91 - 100 points		10 (ten) (A)		
19.	Prerequisites for taking the final exam	Realized activity 17.2				
20.	Language of Instruction	Macedonian				
21.	Course evaluation	Student questionnaire				
22.	Textbooks					
	22.1.	Instruction materials				
		No.	Author	Title	Publisher	Year

		1.	Lj. Dudeski, J. Caloska	Medical Engineering	Faculty of Mechanical Engineering - Skopje	2011
		2.				
		3.				
	22.2.	Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
		1.				
		2.				