Add. 3	**Course program for the first, second and third level (cycle) of studies**

1.	Course title	Mathematics 1				
2.	Code	185				
3.	Study group(s)	All groups				
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	First / winter	7.	ECTS credits	6	
8.	Instructor	Aleksa Malcheski, Lazo Dimov, Ljubica Stefanova				
9.	Prerequisites	none				
10.	Course objectives (competences): Introduction to the basic concepts of vector algebra, analytic geometry in three dimensional Euclidean space and differential calculus. Competence in using vector algebra and differential calculus for modeling and solving engineering problems.					
11.	Course content: Introduction to the basics of vector algebra and analytic geometry in three dimensional Euclidean space. Review and characteristics of the elementary functions. Introduction to the concepts of limit, continuity and differentiability of a function in one real variable. Deeper understanding of the basic techniques.					
12.	Study methods: lectures, auditory practice, homework, self-learning					
13.	Total hours	6 ECTS x 30 hours = 180 hours				
14.	Hours allocation per activity:	45+30+0+20+85 = 180 hours				
15.	Lectures/Lab	15.1.	Lectures	45 hours		
		15.2.	Lab (student work)	30 hours		
16.	Project Work/Assignments	16.1.	Project assignments	0 hours		
		16.2.	Individual assignments	20 hours		
		16.3.	Self-learning	85 hours		
17.	Points/Marks:					
	17.1.	Tests	90 points			
	17.2.	Projects	0 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	activity 17.3				
20.	Language of Instruction	Macedonian				
21.	Course evaluation	Student questionnaire				

22.	Textbooks				
	Instruction materials				
	No.	Author	Title	Publisher	Year
22.1.	1.	L. Dimov	Mathematics 1	Ss. Cyril and Methodius University in Skopje	2006
	2.	N. Tuneski, B. Jolevska – Tuneska	Differential Calculus	Ss. Cyril and Methodius University	2011

					in Skopje	
		3.	I. James, Glyn	Modern Engineering Mathematics	Pearson, Prentice Hall	2008
		4.				
	22.2.	Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
		1.	A.Malceski	Mathematics 1 (lecture notes)	Faculty of Mechanical Engineering – Skopje	1994
		2	Lj. Stefanova	Mathematics 1 (lecture notes)	Faculty of Mechanical Engineering – Skopje	