

Add. 3		Course program for the first, second and third level (cycle) of studies			
1.	Course title	Mathematics for Engineering			
2.	Code	160			
3.	Study group(s)	Industrial Engineering and Management, Production Informatics			
4.	The organizer of the study program (unit, institute, department)	Institute of Production Engineering; Institute of Mechanical Construction, Mechanization; Machines and Vehicles			
5.	Level (first, second, third)	First			
6.	Academic year / semester	First / winter	7.	ECTS credits	6
8.	Instructor	Nikola Tuneski, Emilija Celakoska			
9.	Prerequisites	none			
10.	Course objectives (competences): Introduction to vector algebra and its applications. Introduction to the concepts of function in one real variable, limit, continuity, differential and integral calculus.				
11.	Course content: Use of the theory of vector algebra, differential and integral calculus in mathematical modeling and solution of technical problems.				
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.	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					
	22.1.	Instruction materials				
		No.	Author	Title	Publisher	Year
		1.	A. Malceski	Engineering Mathematics (lecture notes)	Faculty of Mechanical Engineering – Skopje	1994
		2.	L. Dimov	Mathematics 1	Ss. Cyril and Methodius University	2006
	3.	N. Tuneski, B. Jolevska – Tuneska	Differential Calculus	Ss. Cyril and Methodius University	2011	
	22.2.	Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
		1.	James G.	Modern Engineering Mathematics	Pearson, Prentice Hall	2008
		2.	Lj. Stefanova	Mathematics 1 (lecture notes)	Faculty of Mechanical Engineering – Skopje	
		3.	N. Tuneski, B. Jolevska – Tuneska	Integral Calculus	Ss. Cyril and Methodius University	2011