

Add. 3		Course program for the first, second and third level (cycle) of studies			
1.	Course title	Deformation processing			
2.	Code	237			
3.	Study group(s)	PI			
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	winter	7.	ECTS credits	6
8.	Instructor	Prof D-r Jovan Lazarev			
9.	Prerequisites	Mathematics - signature Mechanics - signature Strength - signature			
10.	Course objectives (competences): Introduction to the theory of the processes in plastic deformation processing.				
11.	Course content: Fundamentals of the theory of plasticity. Introducing the processes of rolling, drawing wires, free forging and forging tools, extrusion. Introduction to the processes of processing castings: drawing, bending, cutting, blanking and drilling, fine blanking. Processing Machinery by deformation.				
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 + 20 + 20 + 80 = 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	20 hours	
		16.2.	Individual assignments	20 hours	
		16.3.	Self-study	80 hours	
17.	Points/Marks:				
	17.1.	Tests	80 points		
	17.2.	Projects	10 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 and laboratory exercises			
20.	Language of Instruction	Macedonian			
21.	Course evaluation	Student questionnaire			
22.	Textbooks				
	22.1.	Instruction materials			
		No.	Author	Title	Publisher

		1.	V. Strezov	Deformation processing	Ss. Cyril and Methodius University in Skopje	1995
		2.	J. Lazarev, V. Strezov	Processing Machinery and deformation	Ss. Cyril and Methodius University in Skopje	2006
		3.				
		Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
	22.2.	1.	S. Kalpakian	Manufacturing Engineering and Technology	Prentice Hall	2006
		2.				