1.	Course	e title		Computer modeling and sin	nulation o	f forging	
2	Codo			processes 170			
2. 3.	Code	group(s)		PI, P.Inf			
3. 4.		group(s) ganizer of the study progra		aculty of Mechanical Engir	ooring -	Skonio	
4.		nstitute, department)		Ss. Cyril and Methodius Un			
5.		(first, second, third)		First			
6.		mic year / semester	9	summer 7. E	CTS cred	dits	(
8.	Instruc		F	Prof D-r Atanas Kochov			
9.	Prerec	quisites	1	N/A			
	analyz	ing and identification of possing technologies.		esses, optimization of proceblems during production, d			
11.	Technologies of sheet metal shaping, hot and cold forging processes, computer modeling of machining processes with bending, blanking, drawing sheets, the analysis of stress-strain, optimization of processing technologies, defining parameters of the shaping process.						
12.	Interac	methods: ctive lectures, exercises au	uditory and	d / or laboratory, individual :	and / or te	eam work	ina oi
13		t assignments, self-study.		•			9
13. 14	Total h	nours		6 ECTS x 30 hours =	180 hour	s	
14.	Total h	nours allocation per activity:	·	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6	180 hour	s nours	
	Total h	nours	15.1.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures	180 hour	s nours 30 hc	ours
14.	Total h Hours Lectur	nours allocation per activity:	·	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work)	180 hour	s nours	ours
14. 15.	Total h Hours Lectur	nours allocation per activity: es/Lab	15.1 15.2 16.1	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments	180 hour	nours 30 ho 30 ho 30 ho	ours ours
14. 15.	Total h Hours Lectur	nours allocation per activity: es/Lab	15.1. 15.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments	180 hour	nours 30 ho	ours ours
14. 15.	Total h Hours Lectur	nours allocation per activity: es/Lab	15.1 15.2 16.1	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour	nours 30 ho 30 ho 30 ho	ours ours ours
14. 15.	Total h Hours Lectur Project	allocation per activity: es/Lab t Work/Assignments /Marks:	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour	30 hc 30 hc 30 hc 30 hc 30 hc	ours ours ours ours
14. 15.	Total h Hours Lectur Projec	allocation per activity: es/Lab t Work/Assignments	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour	30 hc 30 hc 30 hc 30 hc	ours ours ours ours
14. 15.	Points 17.1.	allocation per activity: es/Lab t Work/Assignments /Marks:	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc 70 points	ours ours ours ours
14. 15.	Points 17.1.	allocation per activity: es/Lab t Work/Assignments  /Marks: Tests	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc	ours ours ours ours ours
14. 15.	Points 17.1. 17.2.	nours allocation per activity: es/Lab t Work/Assignments  /Marks: Tests Projects	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc 70 points 20 points	ours ours ours ours
14. 15. 16.	Points 17.1. 17.2.	allocation per activity: es/Lab t Work/Assignments  /Marks: Tests Projects Attendance	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments Self-study  Under 50 51 - 60 points	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc 70 points 20 points	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2.	allocation per activity: es/Lab t Work/Assignments  /Marks: Tests Projects Attendance	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours = 30 + 30 + 30 + 30 + 6 Lectures Lab (student work) Project assignments Individual assignments Self-study Under 50	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc 30 hc 20 points 10 points	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2.	allocation per activity: es/Lab t Work/Assignments  /Marks: Tests Projects Attendance	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours =   30 + 30 + 30 + 30 + 6      Lectures	180 hour 60 = 180 h	30 hc 30 hc 30 hc 30 hc 30 hc 30 hc 40 hc 40 points 10 points 5 6 7 (se 8 (e	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2.	allocation per activity: es/Lab t Work/Assignments  /Marks: Tests Projects Attendance	15.1. 15.2. 16.1. 16.2.	6 ECTS x 30 hours =   30 + 30 + 30 + 30 + 6      Lectures	180 hour 60 = 180 h	70 points 10 points 1 (see 8 (e 9 (	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2. 17.3. Gradir	mours allocation per activity: es/Lab  t Work/Assignments  /Marks:     Tests     Projects     Attendance ng scale	15.1 15.2 16.1 16.2	6 ECTS x 30 hours =   30 + 30 + 30 + 30 + 6      Lectures	180 hour 60 = 180 h	70 points 10 points 1 (see 8 (e 9 (	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2. 17.3. Gradin	allocation per activity: es/Lab  t Work/Assignments  /Marks:     Tests     Projects     Attendance ng scale	15.1 15.2 16.1 16.2	6 ECTS x 30 hours =   30 + 30 + 30 + 30 + 6      Lectures	180 hour 60 = 180 h	70 points 10 points 1 (see 8 (e 9 (	ours ours ours ours ours ours ours ours
14. 15. 16.	Points 17.1. 17.2. 17.3. Gradin	mours allocation per activity: es/Lab  t Work/Assignments  /Marks:     Tests     Projects     Attendance ng scale	15.1 15.2 16.1 16.2	6 ECTS x 30 hours =   30 + 30 + 30 + 30 + 6      Lectures	180 hour 60 = 180 h	70 points 10 points 1 (see 8 (e 9 (	ours ours ours ours ours ours ours ours

	22.	Textbooks							
		22.1	Instruction materials						
	22.1.	No.	Author	Title	Publisher	Year			

	1.	A. Kochov, J. Caloska	Computer modeling and simulation of forging processes	Intern script, Faculty of Mechanical Engineering - Skopje	2005	
	2.					
	3.					
	Supplemental Instruction Materials					
	No.	Author	Title	Publisher	Year	
22.2.	1.	A.Saxena, B. Sahay	Computer Aided Engineering Design	Oxford	2003	
	2.					