

Add. 3		Course program for the first, second and third degree of studies			
1.	Course title	Design of metal products			
2.	Code	134			
3.	Study group(s)	MJSE, DS, ID			
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 degree)	First			
6.	Academic year / semester	winter	7.	Number of ECTS credits	6
8.	Professor	A. Prof. Dimitri Kozinakov, PhD			
9.	Preconditions for enrolling the course	none			
10.	Purpose of the course program (competences):  Introduction to the design of metal constructions, parts and decorative elements. Capable for designing metal furniture, metal accessories, decorative forged fences, forged parts and assemblies, commercials panels, columns, lampposts, billboards, towers, masts, domes, eaves etc.				
11.	Contents of the course program:  Introduction. General inf. about metal structures, assemblies and parts. Properties of structural metals. Steel. Aluminum. Brass. Bronze. Cast and forged iron. Metal semi-products. Basic assembly parts and elements of metal constructions. Constructive details. Design of metal furniture and accessories. Design of metal constructions (commercials panels, columns, candelabras, billboards, masts). Design of roof type constructions (domes arch and overhang). Making workshop documentation. Design of catalog material for above mention content.				
12.	Study methods:  interactive lectures, auditory practice and/or laboratory practice, self running and/or team work projects, self learning				
13.	Total available time fund.	6 ECTS x 30 hours = 180 hours			
14.	Distribution of the available time.	30 + 30 + 0 + 0 + 120 = 180 hours			
15.	Forms of teaching activities.	15.1.	Lectures, theory	30 hours	
		15.2.	Practice, seminars, team work	0 hours	
16.	Other forms of activities	16.1.	Project assignments	0 hours	
		16.2.	Self running assignments	0 hours	
		16.3.	Home studying	120 hours	
17.	Evaluation methods				
	17.1.	Tests			90 points
	17.2.	Projects			10 points
	17.3.	Activity and participation			0 points
18.	Evaluation criteria (score / rating)	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.	Signature and final exam requirements	tasks 17.2 competed			
20.	Language used for performing the teaching	Macedonian language			
21.	Evaluation method for monitoring the teaching quality	Questionnaire and other type of continuum evaluation			

22.	Literature				
	Basic literature				
	No.	Author	Title	Publisher	Year
22.1.	1.	Димитри Козинаков	Teaching lectures		
	2.				
	3.				
	Additional references				
	No.	Author	Title	Publisher	Year
22.2.	1.				