

Add. 3		Course program for the first, second and third degree of studies			
1.	Course title	Design and calculation of structures			
2.	Code	235			
3.	Study group(s)	DS			
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	summer	7.	Number of ECTS credits	6
8.	Professor	Prof. Marjan Gavriloski, PhD			
9.	Preconditions for enrolling the course	none			
10.	Purpose of the course program (competences): Introduction to concepts, principals and methods for correct designing of structures. Computer aided modeling and calculation of elements in machine devices and load bearing constructions.				
11.	Contents of the course program: Types of joints in load bearing constructions. Calculations of butt and angle welds. Calculation of welded joints under dynamical load. Basic rules for designing elements for machines devices and load bearing structures. Selection of joints in construction. Computer aided modeling and calculation of elements for machine elements and loaf bearing structures.				
12.	Study methods: interactive lectures, auditory practice and/or laboratory practice, self running and/or team work projects, self learning				
13.	Total available time period	6 ECTS x 30 hours = 180 hours			
14.	Available time assessment	30 + 15 + 45 + 0 + 90 = 180 hours			
15.	Educational activity module	15.1.	Teaching lectures	30 hours	
		15.2.	Practice, seminars, team work	15 hours	
16.	Other activity module	16.1.	Project assignments	45 hours	
		16.2.	Selfrunning assignments	0 hours	
		16.3.	Home studying	90 hours	
17.	Evaluation methods				
	17.1.	Tests			75 points
	17.2.	Projects			20 points
	17.3.	Activity and participation			5 points
18.	Evaluation criteria (points and marks)		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	none			
20.	Language used for performing the teaching	Macedonian language			
21.	Method used for following the teaching quality	Questionnaire and other type of continuum evaluation			
22.	References				
	22.1.	Main references			
		No.	Author	Title	Publisher

		1.	С. Стојмановски	Заварени врски и конструкции - скрипта	МФС	2006
		2.	E. Oberšmit	Osnove konstruiranja	Zagreb	1985
		3.				
		Additional references				
	22.2.	No.	Author	Title	Publisher	Year
		1.	P. Македонија	Норми и стандарди		