Add. 3		**Course program for the first, second and third degree of studies**			
1.	Course title	Analysis by the finite element method			
2.	Code	108			
3.	Study group(s)	IND			
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	Summer	7.	Number of ECTS credits	6
8.	Instructor	Associated professor PhD Petar Simonovski			
9.	Prerequisites	Materials, technologies and tests – signature Technical mechanics 1 - passed			
10.	Course objectives (competences): Ability of the student - future industrial designer to calculate the stresses in the parts of the products with a complex configuration by applying the finite elements method by the introduction of commercial application programs .				
11.	Course content: Modeling and discretisation of industrial products and application of method. Finite Element types: Line, surface and space. Stresses, deformations and displacements, their presentation, animation and interpretation.				
12.	Study methods: interactive lectures, auditory practice and/or laboratory practice, self running and/or team work projects, self learning				
13.	Total hours	6 ECTS x 30 classes = 180 classes			
14.	Hours allocation per activity:	30 + 30 + 15 + 15 + 90 = 180 classes			
15.	Lectures/Lab	15.1.	Teaching lectures		30 classes
		15.2.	Practice, seminars, team work		30 classes
16.	Project Work/Assignments	16.1.	Project assignments		15 classes
		16.2.	Selfrunning assignments		15 classes
		16.3.	Home studying		90 classes
17.	Points/Marks:				
	17.1.	Tests			80 points
	17.2.	Projects			15 points
	17.3.	Attendance			5 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	Implemented activities 17.2 and 17.3			
20.	Language of Instruction	Macedonian language			
21.	Course evaluation	Surveys and other forms of continuous activities			

22.	Textbooks				
		Instruction materials			
	22.1.	No.	Author	Title	Publisher	Year
		1.	Paul Kurowski	Finite elements for design engineers	McGraw-Hill	2010

		2.	SolidWorks Corp.	Solid Works Simulation and Motion Guide	SolidWorks Corp.	2011
		3.				
	22.2.	Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
		1.	Budinas - Nisbett	Shigley's Mechanical Engineering Design	Mc Graw Hill	2010