Add. 3	**Course program for the first, second and third level (cycle) of studies**

1.	Course title	Thermodynamics				
2.	Code	308				
3.	Study group(s)	PI, TML, TE, HIMV, MSKI, IIM, MV, EE, MHT, AUS				
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.	ECTS credits	6	
8.	Instructor	Assistant Professor Filip Mojsovski, Ph.D				
9.	Prerequisites	no				
10.	Course objectives (competences): Studying of the science of heat, the use of thermal systems					
11.	Course content: Temperature, Thermal comfort, First law of Thermodynamics, Equation of state for ideal gases, State changes for ideal gases, Circular processes, Second law of Thermodynamics, Water vapor, Moist air, Liquefaction of gases, Fluid flow, Combustion, Heat transfer, Thermal conduction, Thermal convection, Thermal radiation, Heat exchangers					
12.	Study methods: Interactive teaching, exercises, single-handed lessons					
13.	Total hours	6 ECTS x 30 = 180 classes				
14.	Hours allocation per activity:	30 + 30 + 30 + 30 + 60 = 180 classes				
15.	Lectures/Lab	15.1.	Lectures	30		
		15.2.	Lab (student work)	30		
16.	Project Work/Assignments	16.1.	Project assignments	30		
		16.2.	Individual assignments	30		
		16.3.	Self-study	60		
17.	Points/Marks:					
	17.1.	Tests	70 points			
	17.2.	Projects	20 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	No				
20.	Language of Instruction	Macedonian				
21.	Course evaluation	Student questionnaire				

22.	Textbooks					
		Instruction materials				
		No.	Author	Title	Publisher	Year
	22.1.	1.	B. Andrejevski	Thermodynamics	Ss. Cyril and Methodius University - Skopje	1988
		2.	F. Mojsovski	Thermodynamics-Examples	Faculty of Mechanical Engineering - Skopje	2011

		3.	A. Mojsovski	Heat transfer	Ss. Cyril and Methodius University - Skopje	1992
	22.2.	Supplemental Instruction Materials				
		No.	Author	Title	Publisher	Year
		1.	F. Bošnjaković	Nauka o toplini	Tehnička knjiga - Zagreb	1976