

Add. 3		Course program for the second level (second cycle - postgraduate) of studies			
1.	Course title	Energy efficiency			
2.	Code	1M6SEE03			
3.	Study group(s)	SEE			
4.	The organizer of the study program (unit, institute, department)	"Ss. Cyril and Methodius" University in Skopje, Faculty of Mechanical Engineering - Skopje			
5.	Level (first, second, third)	Second			
6.	Academic year / semester	V / winter	7.	ECTS credits	6
8.	Professor	Prof. dr. Done Tashevski			
9.	Prerequisites	None			
10.	Course objectives (competences): Candidates are competent for analysis, modeling, optimization and implementation of different systems for energy efficiency in different areas such as buildings, industry, agriculture and forestry, and transport with introducing a complete energy management in these areas.				
11.	Course content: Methods for analyzing modern systems for energy efficiency. Introducing the existing models for the calculation of processes and systems for energy efficiency. Ways for optimization and selection of parameters in which optimizes the system in order to meet the energy efficiency criteria. Implementation of analyzed, modeled and optimized systems to specific examples.				
12.	Study methods: lectures, lab, project assignments, individual assignments, self-study.				
13.	Total hours	6 ECTS x 30 = 180 hours			
14.	Hours allocation per activity:	30 + 15 + 40 + 30 + 65 = 180 hours			
15.	Lectures/Lab	15.1.	Lectures (15 weeks x 2)	30 hours	
		15.2.	Lab (student work)	15 hours	
16.	Project Work/Assignments	16.1.	Project assignments	40 hours	
		16.2.	Individual assignments	30 hours	
		16.3.	Self-study	65 hours	
17.	Points/Marks:				
	17.1.	Exams			40
	17.2.	Projects			50
	17.3.	Attendance			10
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	Activity 16.1			
20.	Language	English			
21.	Course evaluation	Student questionnaire			

22.	Textbooks				
22.1	Instruction materials				
	No.	Author	Title	Publisher	Year
	1.	D. Tashevski	Energy efficiency	Selected lectures and handouts	2014
	2.	D.R. Wulfinghoff	Energy efficiency	Energy institute press	1999
22.2	3.	P. Bertoldi	Energy efficiency	Springer	2007
	Supplemental Instruction Materials				
	No.	Author	Title	Publisher	Year
	1.	D. R. Wulfinghoff	Energy Efficiency Manual	Energy institute press	2000