

Add. 3		Course program for the first, second and third level (cycle) of studies				
1.	Course title	Compressors and plants				
2.	Code	174				
3.	Study group(s)	TE				
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	winter	7.	Number of ECTS credits	6	
8.	Instructor	Prof. Milan Šarevski Ph.D				
9.	Prerequisites	none				
10.	Course objectives (competences): Introduction in compressor and plants; thermodynamic and flow calculations; performance characteristics; control; optimization and design; compressor plants; cooling systems; drying, filtration and storage; design of compressor plants and systems					
11.	Course content: Thermodynamic of compressor processes; Flow processes; Turbocompressors- CFD methods; operating and performance characteristics; optimal design; regulation and control. Compressor plants – piston compressor, turbocompressor, screw compressor; cooling systems, drying, filtration and storage; design of compressor plants; exploitation and maintenance.					
12.	Study methods: Teaching lectures, auditory/laboratory practice, self/team work, home studding					
13.	Total hours	6 ECTS x 30 hours = 180 hours				
14.	Hours allocation per activity:	30 + 30 +10 +10 +100 = 180 hours				
15.	Lectures/Lab	15.1.	Lectures	30 hours		
		15.2.	Lab (student work)	30 hours		
16.	Project Work/Assignments	16.1.	Project assignments	30 hours		
		16.2.	Individual assignments	30 hours		
		16.3.	Self-study	60 hours		
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	None				
20.	Language of Instruction	Macedonian				
21.	Course evaluation	Student questionnaire				
22.	Textbooks					
	22.1.	Instruction materials				
		No.	Author	Title	Publisher	Year
1.	I.Cerepnalkovski	Compressors	UKIM	1994		

		2.	M.Sharevski	Design of piston, scroll, rotary and turbo compressors and plants	UKIM	
		3.	Seleznev, Galerkin	Centrifugal compressors	Машиностроение	1982
		Supplemental Instruction Materials				
	22.2.	No.	Author	Title	Publisher	Year
		1.	Eckert, Schnell	Axial und radial kompressoren	Springel, Berlin	1974
		2.	Френкель	Поршневие компрессори	Машиностроение	1978
		3.	Сакун	Винтовые компрессори	Машиностроение	1996