	. 3	Course progran	n for th	e first, second	and thi	rd degree	of studies			
1.	Course tit	tle	W	Work Study						
2.	Code			302						
3.	Study group(s)			IEM (Industrial Engineering and Management)						
4.	The organ	nizer of the study program		Faculty of Mechanical Engineering - Skopje,						
	(unit, institute, department)			 Cyril and Meth 	nodius l	Jniversity	in Skopje			
5.	Level (fire	(first, second, third degree) First								
6.	Academic year / semester			Summer 7. Number of E			of ECTS	CTS 6		
						credits				
8.	Professor			Prof. Robert Minovski, PhD						
9.	Preconditions for enrolling the course			No						
10.	Purpose of the course program (competences): The essential competences that should be acquired during this course are: (1) to be able to use methods for time analysis and time measurement, as a basis for further design of other systems, like (a) Production Planning and Control, (b) Compensation System, etc., (2) to be familiar with a methodology for work rationalization/ improvement, together of accompanying methods and (3) to be familiar with the basic principles of the compensation of the working									
11	force.	of the course program:								
11.		of the course program: ntroduction to the Work Stu	dv							
		Vork Measurement	uy							
		a. Definition of the Tim	ne Stand	dard						
		b. Need for Time Meas								
		c. Types of Time Stan	dards							
		d. Structure of the Tim		lard						
		e. Methods for Determ	ination	of the Time Star	ndard					
		f. Monitoring of the Im	plemen	tation of the Tim	ne Stan	dard				
	3. V	Vork Rationalization	•							
		 a. Need for Work Ratio 								
		b. Methodology for Wo								
	_	c. Some Specific Appr			nalizatio	n				
	4. C	Compensation of the Working								
		a. The Role of the Cor								
		b. Basic Principals of t	ne Com	b. Basic Principals of the Compensation of the Working Force						
12.	Ctudy mo									
12.		thodo								
		thods:	work or	the project ass	sianmer	nte (eelf-ru	nning assig	nments)		
	with presentations, autonomous learning (home studying).							nments)		
	with prese	e classes, exercises, team			signmer	nts (self-ru	nning assig	nments)		
13.	<u> </u>	e classes, exercises, team entations, autonomous lear		ome studying).				nments)		
13. 14.	Total ava	e classes, exercises, team entations, autonomous lear ilable time period		ome studying). 6 ECTS x 3	0 hours	= 180 ho	urs	nments)		
	Total ava Available	e classes, exercises, team entations, autonomous lear ilable time period time assessment		6 ECTS x 3 30 + 30 + 0	0 hours + 20 +	= 180 ho	urs) hours			
14.	Total ava Available	e classes, exercises, team entations, autonomous lear ilable time period	ning (h	ome studying). 6 ECTS x 3	0 hours + 20 + ures	= 180 ho 100 = 180	urs hours	nments) 30 hours 30 hours		
14.	Total ava Available	e classes, exercises, team entations, autonomous lear ilable time period time assessment	ning (he	6 ECTS x 3 30 + 30 + 0 Teaching lectu	0 hours + 20 + ures	= 180 ho 100 = 180	urs hours	30 hours		
14.	Total ava Available Education	e classes, exercises, team entations, autonomous lear ilable time period time assessment	ning (he	6 ECTS x 3 30 + 30 + 0 Teaching lecture Practice, semi	0 hours + 20 + ures inars, te	= 180 ho 100 = 180	urs hours	30 hours		
14. 15.	Total ava Available Education	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module	15.1. 15.2.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work	0 hours + 20 + ures inars, te	= 180 ho 100 = 180	urs hours	30 hours		
14. 15.	Total ava Available Education	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module	15.1. 15.2.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs hours	30 hours		
14. 15.	Total ava Available Education	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours	30 hours 30 hours 20 hours		
14. 15.	Total ava Available Education	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours	30 hours 30 hours		
14. 15.	Total ava Available Education Other act	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours	30 hours 30 hours 20 hours		
14. 15.	Total ava Available Education Other act	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours	30 hours 30 hours 20 hours		
14. 15.	Total ava Available Education Other act	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours	30 hours 30 hours 20 hours		
14. 15.	Total ava Available Education Other act Evaluatio 17.1. T	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours 2	30 hours 30 hours 20 hours 00 hours		
14. 15.	Total ava Available Education Other act Evaluatio 17.1. T 17.2. P	e classes, exercises, team entations, autonomous lear illable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours 10 8	30 hours 30 hours 20 hours 00 hours 0 points		
14. 15.	Total ava Available Education Other act Evaluatio 17.1. T 17.2. P	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1.	6 ECTS x 3 30 + 30 + 0 Teaching lectu Practice, semi work Project assign Selfrunning as	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours 10 8	30 hours 30 hours 20 hours 00 hours		
14. 15.	Total ava Available Education Other act Evaluatio 17.1. T 17.2. P 17.3. A	e classes, exercises, team entations, autonomous lear illable time period time assessment nal activity module ivity module	15.1. 15.2. 16.1. 16.2.	6 ECTS x 3 30 + 30 + 0 Teaching lecture Practice, seminal work Project assign Selfrunning as Home studying	0 hours + 20 + ures inars, te	= 180 hor 100 = 180 eam	urs) hours 2 10	30 hours 30 hours 20 hours 00 hours 0 points		
14. 15. 16.	Total ava Available Education Other act Evaluatio 17.1. T 17.2. P 17.3. A	e classes, exercises, team entations, autonomous lear ilable time period time assessment nal activity module ivity module n methods ests rojects ctivity and participation	15.1. 15.2. 16.1. 16.2.	6 ECTS x 3 30 + 30 + 0 Teaching lecture Practice, seminal work Project assign Selfrunning as	0 hours + 20 + ures inars, te ments ssignme	= 180 hor 100 = 180 eam	urs) hours 2 10 8 11 15	30 hours 30 hours 20 hours 00 hours 0 points 0 points		

		71 - 80 points	8 (eight) (C)	
		81 - 90 points	9 (nine) (B)	
		91 - 100 points	10 (ten) (A)	
19.	Signature and final exam requirements	Realized activity 17.2		
20.	Language used for performing the teaching	Macedonian language		
21.	Method used for following the teaching quality Questionnaires and other forms of continuous evaluation			

22.	References							
		Main references						
		No.	Author	Title	Publisher	Year		
	22.1.	1.	R. Minovski, D. Jovanoski	Work Study	University of Ss. Cyril and Methodious	To be published		
		2.	-	Actual materials for the project assignment	-	-		
		3.						
		Additional references						
	22.2.	No.	Author	Title	Publisher	Year		
		1.						