

Add. 3		Course program for the first, second and third degree of studies			
1.	Course title	Production, products and services			
2.	Code	280			
3.	Study group(s)	Plnf			
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 degree)	First			
6.	Academic year / semester	Summer	7.	Number of ECTS credits	6
8.	Professor	Prof. Valentina Gecevska			
9.	Preconditions for enrolling the course	None			
10.	Purpose of the course program (competences): Identifying of production and service system, their basic functions, structure, characteristics, products and services.				
11.	Contents of the course program: Acquiring knowledge about management functions and organization of companies, production and service systems, their structure, organization, functions, processes, and characteristics. Study of information processing in the production and service systems, the systemic approach concept, types of production, production planning and management, the concept of quality in production and service systems. Introduction of the concept of competitiveness of production and service systems, the concept of product development and management services and notion of life cycle in production and service systems.				
12.	Study methods: Interactive teaching, Laboratory and/or in-class exercises, individual and/or team work on projects, self-study.				
13.	Total available time period	6 ECTS x 30 hours = 180 hours			
14.	Available time assessment	30 + 30 + 30 + 30 + 60 = 180 hours			
15.	Educational activity module	15.1.	Teaching lectures	30 hours	
		15.2.	Practice, seminars, team work	30 hours	
16.	Other activity module	16.1.	Project assignments	40 hours	
		16.2.	Selfrunning assignments	20 hours	
		16.3.	Home studying	60 hours	
17.	Evaluation methods				
	17.1.	Tests			70 points
	17.2.	Projects			20 points
	17.3.	Activity and participation			10 points
18.	Evaluation criteria (points and marks)		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.	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	Surveys and other forms of continuous evaluation			

22.	References				
22.1.	Main references				
	No.	Author	Title	Publisher	Year
	1.	V. Dukovski, V. Gecevska	Production, products and services	Faculty of Mechanical Engineering, Skopje, UKIM	2004
	2.	C. Chang	Service System Management and Engineering	J.Willy & Sons, USA	2010
	3.				
22.2.	Additional references				
	No.	Author	Title	Publisher	Year
	1.	T. Sakao	Introduction to Product / Service System Design	Springer	2009
	2.				
	3.				