SYLLABUS

Basic data of the subject	
Faculty:	**Faculty of Engineering and Informatics**
Title of the subject:	**Technological Process Design**
Level:	**Bachelor**
Course Status:	**Core**
Year of studies:	**3**
Number of hours per week:	**3**
Value of Credits - ECTS:	**4**
Time / location:	
Course lecturer:	**Fatmier Cerkini**
Contact details:	**Fatmir.cerkini@ushaf.net**

Course Description	*This course will introduce students to the basics of technological processes and their design in different industries and for different products.*
Objectives of the course:	*The objective of this course is to provide students with knowledge about technological processes, their types and in particular the design of technological processes using various computer programs.*
Expected learning outcomes:	*Upon successful completion of this subject, students will be able to:* • *know the basic design basics of technological processes* • *know about the impact of technological processes on product design and vice versa* • *eliminate manufacturing errors by using the basics of technological processes* • *know the basics of designing technological processes with computer support*

Contribution to the student load (which must correspond with learning outcomes)			
Activity	**Hour**	**Day/Week**	**In total**
Lectures with lab tutorials	3	15	45
Internship			
Contacts with teacher / consultations	1	5	5
Field exercises			
Midterm, seminars and projects.	2	8	16
Homework			
Self-learning time student (at the library or at home)	2	15	30
Final preparation for the exam	1	5	5
Time spent on evaluation (tests, quiz and final exam)	1	2	2
Projects and presentations.	1	1	1
Total			104

Teaching methodology:	*Lectures and exercises combined with tutorials and classroom and laboratory exercises*
Assessment methods:	*Course work 40%* *Final exam 60%*

Literature	
Basic Literature:	1. *Fatmir Çerkini, Projektimi i proceseve teknologjike (Handout), Fakulteti i Shkencave të Aplikuara – Ferizaj*
Additional Literature:	1. *Prof.Dr.Ing.A.Bushati - Algoritme punimi në ,,Teknologji mekanike",Tiranë,* 2. *Adnan Bodinaku –Teknologjia mekanike 2,I dhe II, Tiranë,* 3. *Halevi, G. ; Principles of Process Planning, Chapman & Hall, London,* 2. *4. Gačnik, V., Vodonik, F. : Projektiranje tehnoloških procesa, tehnička knjiga, Zagreb*

Designed learning plan	
Week:	**Lectures and exercises to be held**
Week one:	*Content and objectives of technological process design (TPD).*
Week two:	*Determining the type and order of operations.*
Week three:	*Generation of technological process variants.*
Week four:	*Production dimensioning and tolerances, Positioning and tightening, processing errors.*
Week five:	*Production time: Time structure, production time determination methods.*
Week six:	*Production cost calculation models.*
Week seven:	*TPD report and production design.*
Week eight:	*Computer-aided design (CAPP) process design.*
Week nine:	*TPD requirements with different functions in the company.*
Week ten:	*Production monitoring and control, productivity management.*
Week eleven:	*Sales and supply, design and construction, management, etc.*
Week twelve:	*Report of production / business strategies and TPD.*
Week thirteen:	*The impact of technological processes on the overall performance of the business.*
Week fourteen:	*Submission of the course work*
Week fifteen:	*Summary*

Academic policies and rules of conduct
Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.