

SYLLABUS

The basic data of the subject			
University	University of Applied Sciences in Ferizaj		
Academic unit	Faculty of Engineering and Informatics		
Program	Industrial Engineering with Informatics		
The title of the subject:	Unconventional processing methods		
Level:	Bachelor		
The status of the subject:	Core		
Year of study:	III, Semester V		
Number of hours per week:	3		
ECTS:	5		
Time / location:			
Professor:			
Contact:			
Description of the subject:			
Description of the subject:		<i>With changes in the processing techniques and processes, this course will bring to students the unconventional and untraditional processing techniques and processes used in metal industry.</i>	
Objective of the subject:		<i>The objective of this course is to introduce students to new modern methods of metalworking.</i>	
Expected learning outcome:		<p><i>After successful completion of the course, students will be able to:</i></p> <ul style="list-style-type: none"> • <i>know how the processing of metals with unconventional methods, ultrasound, with erosion, laser, etc.</i> • <i>determine the most rational type of processing.</i> • <i>determine the procedure for processing these types of unconventional car.</i> • <i>Acknowledge the types and constructions applied to unconventional processing and make comparisons with classic cars.</i> 	
Prerequisites		N/A	
<i>Contribution to the student's workload (which should correspond to the student's learning outcomes)</i>			
Activity	Hours	Days/week	Total
Teaching	3	15	45
Practical work	1	15	15
Contacts with the professor/consultations	1	5	5
Other exercises	-	-	-
Test/ seminars	2	8	16
Homework			
Student study time (in library or at home)	2	15	30
Final preparation for examination	2	6	12
Time spent on assessment (tests, quiz, final exam)	1	1	1
Projects, presentations	1	2	2
Total			126
Teaching methodology:		<i>Lecture, seminar, discussion, practical work</i>	

Methods of assessment:	<i>Seminar: 20 % Intermediate test: 30% Exam: 50%</i> Rating: <i>91-100 points – graded 10 (ten) 81-90 points – graded 9 (nine) 71-80 points – grade 8 (eight) 61-70 points – grade 7 (seven) 51-60 points – grade 6 (six) 0-50 points – The student repeats the exam.</i>
Literature:	
Basic literature:	1. <i>Metodat jokonvencionale te perpunimit te metaleve, Dr.sc.Nexhat Qehaja, UP Prishtine</i>
Additional literature:	2. <i>1.Rumjancev E.M.,Davidov A.D.:Tehnologija elektrohemiceskoj obrabotki metalor,</i> 3. <i>2.Muren H.:Obrada odrezovanjem in odnosenjem, Fakultet za strojninstvo, Ljubljana,.</i>

Described Learning Plan:	
Week	Lectures to be taught
<i>First week:</i>	<i>Introduction. Mechanical processing methods.</i>
<i>Second week:</i>	<i>Mechanical-anodic machining.</i>
<i>Third week:</i>	<i>Thermoelectric processing methods.</i>
<i>Fourth week:</i>	<i>Students practice in Ferizaj metal construction factory.</i>
<i>Fifth week:</i>	<i>Electro-erosion processing</i>
<i>Sixth week:</i>	<i>Laser processing.</i>
<i>Seventh week:</i>	<i>Electronic and ionic vortex processing.</i>
<i>Eighth week:</i>	<i>Plasma processing</i>
<i>Ninth week:</i>	<i>Electrochemical processing methods.</i>
<i>Tenth week:</i>	<i>Students practice in Ferizaj metal construction factory</i>
<i>Eleventh week:</i>	<i>Presentation of seminar papers by students.</i>
<i>Twelfth week:</i>	<i>Students practice in Ferizaj metal construction factory</i>
<i>Thirteenth Week:</i>	<i>Chemical processing methods. Chemical-mechanical processing.</i>
<i>Fourteenth Week:</i>	<i>Combined processing methods. Electrochemical corrosion polishing.</i>
<i>Fifteen week:</i>	<i>Evaluation and presentation of seminar papers</i>

Academic Policies and Rules of Conduct:
<i>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.</i>