

SYLLABUS

Basic data of the subject		Basic data of the
University/Faculty:	University of Applied Sciences in Ferizaj/ Faculty of Engineering and Information Technology	
Title of the subject:	Mechanisms	
Level:	Bachelor	
Course Status:	Elective	
Year of studies:	I	
Number of hours per week:	4	
Value of Credits - ECTS:	5	
Time/ location:	318	
Course lecturer:	Inxh. i dipl.mak. Halit Mehmeti	
Course details:	Kabinet-318 halit.mehmeti@ushaf.net	
Course description	<i>This course will introduce students to kinematic equivalence and characteristic pairs, the degree of movement of mechanisms, classification of mechanisms, kinetostatic analysis of mechanisms, plenary mechanisms, mechanism synthesis in general, lumped mechanisms, indentation mechanisms, mechanism kinematics.</i>	
Course contents:	<i>Introduction: Equivalent kinematic pairs, movement degree of mechanisms, classification of mechanism elements, kinetostatic analysis of mechanisms, lumped mechanisms, indentation mechanisms, plenary mechanisms.</i>	
Objectives of the course:	<i>Sufficient knowledge about the analysis of basic mechanism sythesis, acquisition of computer literacy skills, usage of the matlab and mathcad apps.</i>	
Expected learning outcomes:	<i>Upon completion of this course students will have knowledge of: 1. principles and kinematic analysis of basic mechanisms, motik manivel biel dhe atij me kater allkesh. 2. Perform a kinetostatic analysis of mechanisms. 3. Be able to execute a basic synthesis, including that of lumped mechanisms.</i>	

	4. Perform kinematic and dynamic analysis of lumped mechanisms, be able to use the matlab and mathcad apps. With the theoretical and practical knowledge acquired from this course students will be able to do the analysis and synthesis of basic mechanisms, as well as solve problems in practice.		
Contribution to the student load (which must correspond with learning outcomes)			
Activity	Hour	Day/Week	Total
Lectures	2	15	30
Theoretical exercises / laboratory	2	15	30
Internship	4	3	12
Contacts with teacher / consultations	0.5	10	5
Field exercises	-	-	-
Midterm, seminars and projects.	-	-	-
Homework	-	-	-
Studying (at the library or at home)	1	15	15
Final preparation for the exam	1	15	15
Time spent on evaluation (tests, quiz and final exam)	1	3	3
Projects and presentations	1	15	15
Total			125
Teaching methodology:	<i>Lectures, presentation of practical assignments with examples, kinematic analyses, visits to various mechanisms</i>		
Assessment methods:	Final exam 40% practice 40% attendance 20%		
Literature			
Basic literature:	<p><i>I. Ismail Gojani- Teoria e Mekanizmave – Fakulteti I Inzhineris Mekanike Prishtinë</i></p> <p><i>II. Dr.Anton Qernej- Motorat meDjegje të Brendshme, Mekanizmat me Gunga, Mekanizmat Manivel Biel, Mekanizmat me Susta – Fakulteti i Makineris Sarajev.</i></p>		
Additional literature:	Dr. Ahmet Shala- Analiza dhe Sinteza e Mekanizmave. Fakulteti i Inzhineris Mekanike - Prishtinë		

Designed learning plan:	
Week:	Lectures and exercises to be held
Week one:	<i>Introduction. Introduction to kinematic pairs.</i>
Week two:	<i>Mechanisms with one link and five moving options, kinematic analysis.</i>
Week three:	<i>Mechanisms with two links and four moving options, kinematic analysis.</i>
Week four:	<i>Mechanisms with three links and three moving options, kinematic analysis.</i>
Week five:	<i>Mechanisms with four links and two moving options, kinematic analysis.</i>
Week six:	<i>Mechanisms with five links and one moving option, kinematic analysis.</i>
Week seven:	<i>Spherical kinematic pairs with one link, one universal knot, kinematic analysis.</i>
Week eight:	<i>në hapsirë.</i> <i>Mechanisms with four links in space.</i>
Week nine:	<i>Practice.</i>
Week ten:	<i>Motoric mechanisms manivel biel, lumped mechanisms, mechanisms with buttons, kinematic analysis.</i>
Week eleven:	<i>Paired mechanisms of ingrained indentations.</i>
Week twelve:	<i>Practice.</i>
Week thirteen:	<i>Movement degree of mechanisms and their kinematic analysis.</i>
Week fourteen:	<i>The substitution of the abovementioned pairs with equivalent kinematic pairs.</i>
Week fifteen:	<i>Review of the covered materials.</i>

Academic policies and rules of conduct
Regular attendance, participation in discussions, visits to different enterprises are all mandatory.