SYLLABUS

Basic data of the subject	
University	**University of Applied Sciences in Ferizaj**
Academic unit	**Faculty of Engineering and Informatics**
Program	**Industrial Engineering with Informatics**
Title of the subject:	**Mechanics I**
Level:	**Bachelor**
Course Status:	**Core**
Year of studies:	**1, Semester II**
Number of hours per week:	**3**
Value of Credits - ECTS:	**5**
Time / location:	
Course lecturer:	
Contact details:	
Course Description	*This course will provide students with the basics of statics and the sustainability of materials in order to increase students' ability to calculate the reactions of bodies to each other and the dimensioning of the carriers of these loads.*
Objectives of the course:	*The aim of this course is to provide students with sufficient knowledge and skills to calculate forces, the moment of forces per point and axis. and the resistance of materials in order to optimize the dimensioning of supporting bodies.*
Expected learning outcomes:	*Upon successful completion of this subject, student will be able to:* • *recognize the force and moment of force per point and axis.* • *calculate the reactions and graphically represent them* • *understand the divisions and strains to which the material is subjected.* • *calculate the center of gravity and make the dimensioning of the material which is subject to axial splitting, twisting, bending.*
Prerequisites	*N/A*

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	15	15
Field exercises			
Midterm, seminars and projects.	2	2	4
Homework	1	15	15
Self-learning time student (at the library or at home)	2	10	20
Final preparation for the exam	1	15	15

Time spent on evaluation (tests, quiz and final exam)	1	6	6
Projects and presentations.	1	5	5
Total			**125**

Teaching methodology:	*Lectures and exercises combined with tutorials and classroom exercises*
Assessment methods:	*Seminar work 30%* *Final exam 70%*
Literature	
Basic Literature:	1. *Prof.dr.Xhevat Perjuci ,Mekanika teknike", Universiteti i Prishtinës*
Additional Literature:	2. *Prof.dr. Fetah Jagxhiu, Përmbledhje detyrash nga mekanika teknike",Prishtinë* 3. *Prof.dr. Fehmi Krasniqi, Detyrat grafike nga statika, Prishtinë.* 4. *Prof.Dr. Ahmet Shala, Përmbledhje detuyrave nga Statika, Prishtinë* 5. *Xhevat Perjuci, Rezistenca e materialeve I, Prishtinë* 6. *Xhevat.Perjuci, Rezistenca e materialeve II, Prishtinë*

Designed learning plan	
Week:	**Lectures and exercises to be held**
Week one:	*Introduction. Knowledge of vectors and forces.*
Week two:	*Solid forces system.*
Week three:	*Moment of force per point.*
Week four:	*The planar system of parallel forces.*
Week five:	*The system of arbitrary forces in the plane.*
Week six:	*Graphic statics*
Week seven:	*Balance of planar axis*
Week eight:	*Friction*
Week nine:	*Center of gravity.*
Week ten:	*Sections, strains and deformations*
Week eleven:	*Fatigue resistance*
Week twelve:	*Pulling and pressing, cutting, bending and twisting*
Week thirteen:	*Dimensioning of full bodies*
Week fourteen:	*Dimensioning of other bodies*
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.