

Basic data of the subject	
Academic Unit:	Faculty of Architecture, Design and Wood Technology
Program:	Design and Construction of Wooden Products
Course Title:	Applied Mathematics
Level:	Bachelor
Course Status:	Mandatory
Year of study:	I
Number of hours per week:	4
Credits - ECTS:	6
Time / location:	UASF
Teacher of the course:	Feride Qorrolli Lubishtani
Contact details:	feride.qorrolli@ushaf.net
Course Description	
	This course will cover the basic elements of Mathematics, including: Basic Concepts of Sets and Sets Actions, Real-Number Sets and Real-Number Actions, Elements of Linear Algebra, Determinants, Matrices and Linear Equations Systems, Understanding the Function and its Application, Elemental Functions and Their Graph, Numerical Verses and their application, Geometry and Measurement, Trigonometry.
Course objectives:	The purpose of this module is to equip students with knowledge and skills for basic mathematical meanings, to fill in the gaps from pre-schooling, in order to be prepared for the job market. As well as the main purpose is their implementation in the field of their study, the development of students' skills and abilities to solve concrete problems in their field of study.
Expected outcomes of learning:	After the successful completion of this course, students will be able to: <ul style="list-style-type: none"> • Have basic conceptual knowledge of the importance of Mathematics in engineering,

	<ul style="list-style-type: none"> Recognize and understand the elements of linear algebra in solving problems in the field of engineering, Apply trigonometry in solving problems from design and construction of wood products. Recognize the concept of the verse and function, types of functions, properties and their applications in constructive engineering. • Know the basic concepts of geometry. 		
The contribution of the student's load (something that should be correspond with the result of the students learning)			
Activity	Hour	Day / week	Total
Lectures	2	15	30
Theoretical / laboratory exercises	2	15	30
Practical work			
Contacts with teacher / consultations	1	10	10
Field exercises			
Tests, seminars	3	2	6
Homework	1	12	12
Self learning time of the student (at the library or at home)	2	15	30
Final preparation for the exam	2	15	30
Time spent on evaluation (tests, quiz, final exam)	2	1	2
Projects, presentations, etc.			
Total			150
Teaching methodology:	Lectures and exercises combined with class discussions		
Evaluation methods:	Assessment of students' knowledge is based on the following activities: Test 1 - 45% Test 2 - 45%		

	Participation and engagement in classes (10%) Final exam: 90% (For those who do not show good results in tests)
Literature	
Basic literature:	<ol style="list-style-type: none"> 1. Dr.Sc.Ajet Ahmeti, Mathematics for economists, Pristina-2006. 2. Dr.Sc.Razim Hoxha, Summary of tasks solved from mathematics I, Pristina 2011
Additional literature:	<ol style="list-style-type: none"> 1. Dr.Sc. Sadri Shkodra, Mathematics I, 2001 2. Dr.Sc. Ejup Hamiti, Mathematics I, 1983 3. Dr.Sc. Faton Berisha and Dr.Sc. Muharrem Berisha, Mathematics for Economics and Business, Pristina-2007
Designed learning plan:	
Week	Topic that will be lectured
Week 1:	Mathematical basic concepts: <ol style="list-style-type: none"> 1. The numbers and their types 2. Sets and actions with sets
Week 2:	Basic mathematical operations: <ol style="list-style-type: none"> 1. The rules of mathematical operations 2. Numeric Scale
Week 3:	Algebra: <ol style="list-style-type: none"> 1. Linear equations 2. Inequations 4. Absolute value
Week 4:	Matrices: <ol style="list-style-type: none"> 1. The meaning of matrices 2. Actions with matrices 3. Application of matrices
Week 5:	Determinants: <ol style="list-style-type: none"> 1. The meaning of the determinants (of the second and third order) 2. Method of minors 3. Method of triangle 4. The method of Kramer
Week 6:	Application of matrices and determinants: <ol style="list-style-type: none"> 1. Solving systems of linear equations with two unknowns

	2. Solving systems of linear equations with three unknowns
Week 7:	Percentages: 1. Understanding the percentage 2. Calculation of percentage 3. Application of percentages in engineering
Week 8:	First Test
Week 9:	The sequences: 1. The meaning of sequences 2. Types of sequences 3. Application of sequences in engineering
Week 10:	Limit of the sequences
Week 11:	Functions with a variable: 1. Forms of appearance of functions 2. The basic functions and their graph. 3. Application of functions in engineering
Week 12:	Geometry and measurement
Week 13:	Second-degree surfaces: 1. Spherical surfaces (spheres) 2. Cylindrical surfaces 3. Conical surfaces (cone)
Week 14:	Trigonometry
Week 15:	Second Test
Academic policies and rules of conduct:	
<i>Regular attendance, to maintain the peace and active engagement in dialogue during lectures and exercises is obligatory.</i>	