

Course Name : Linear Algebra							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 112	A	Spring	3.00	1.00	0.00	3.50	5.00
Lecturer		Sofokli Garo, PhD					
Assistant							
Course language		Albanian					
Course level		Bachelor					
Description		Students in this course will learn methods of solving systems of linear equations.					
Objectives		At the end of this course studentet will be able to learn simple systems of linear equations and apply the knowledge at situations related to their profession.					
Core Concepts		Equations of the first degree with two variables and graphic representation; systems of linear equations and Gauss-Jordan method; implementation in electric network situations; matrix equations and their applicaion in solving linear equation systems.					
Course Outline							
Week	Topic						
1	Syllabus explanation and course regulation						
2	Introduction to systems of linear equations						
3	Gaussian elimination and Gauss-Jordan elimination						
4	Applications of systems of linear equations						
5	Operations with matrices						
6	Properties of matrix operations						
7	The inverse of a matrix						
8	Midterm test						
9	Elementary matrices						
10	Applications of matrix operations						
11	The determinant of a matrix						
12	Evaluation of a determinant using elementary operations						
13	Properties of dterminant						
14	Introducing to Eigenvalues						
15	Review						
16	Final Exam						

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Larson.K; Valvo.V; Linear elementary algebra.		
References	• Petro.P. Alghebra lineare. Tiran 2012		
Course Outcome			
1	Students will be able to mathematically model professional situations that result in systems of linear equations		
Course Evaluation			
In-term Studies		Quantity	Percentage
Midterms		1	30
Quizzes		0	0
Projects		0	0
Term Projects		0	0
Laboratory		0	0
Class Participation		1	20
Total in-term evaluation percent			50
Final exam percent			50
Total			100
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	1	14
Duties	0	0	0
Midterms	1	2	2
Final Exam	1	5	5
Other	9	4	36
Total Work Load			121
Total Work Load / 25 (hours)			4.84
ECTS			5.00