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Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MAT261	Linear Algebra I	3	5	0	0	5	7

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	Teach the basics on Linear Algebra.
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References	

## Theory Topics

Week	Weekly Contents
1	Fields
2	Vector spaces-Subspaces
3	Basis-Dimension
4	Direct sum
5	Linear transformations-Image-Kernel
6	Matrix of Linear transformations-Matrices
7	Exam-Change of Basis
8	Inversibles matrices-Elementary matrices
9	System of Linear Equations
10	Subspaces of row and column- Rank-Theorems about ranks
11	Determinant
12	Cofactor and Cramer methods
13	Gauss method
14	Calcul of determinant