Mathematics

I.   BLOCK OF ALGEBRA LINEAR.

Lesson 1. Matrices and determinants.

1.1. Basic concepts and matrix operations
1.2. Detarminantes. Rank of a matrix.

Lesson 2. Systems of equations

2.1. Basic concepts.
2.2. Discussion and resolution of systems.

Lesson 3. Diagonalization.

3.1. Eigenvalues and eigenvectors
3.2. Diagonalization of a matrix

II.   FUNCTIONS OF A VARIABLE BLOCK.

Lesson 4. Differential calculus.

4.1. Basic Concepts
4.2. The derivative and its applications.

Lesson 5. Integral calculus

5.1. Basic primitives.
5.2. Definite integral.
5.3. Applications.

III.   BLOCK OF INTRODUCTION TO THE FUNCTIONS OF SEVERAL VARIABLES.

Lesson 6. Functions of two variables.

6.1. Concept of function of two varaible. Graphics and contours.
6.2. Partial derivatives.
6.3. Optimization.