

# LINEAR ALGEBRA 2

(ECTS 6)

## GENERAL AND SPECIFIC COURSE GOALS

The main goal of the course is to introduce advanced concepts in linear algebra with appropriate applications

### General course goals

- 1 Students will gain fundamental knowledge in advanced notions and methods of linear algebra. Students will also develop critical and analytical thinking in solving mathematical and quantitative problems.

### Specific course goals

Through lectures, exercises, readings and problem solving students will learn about advanced notions of linear algebra: finitely dimensional vector space (with the concept of scalar product, norms and metrics), linear operator, matrix display, characteristic polynomial, rank, trace operator and its application to solving linear systems of equations and inequalities.