Name of subject: **Mathematics II.**	***NEPTUN code:*** RKXMA2ABNE	***Number of hours:*** *lec+gs+lab* 2+3+0	***Credit:*** 6 ***Requirements:*** examination
Course coordinator: Henry González Mastrapa PhD	***Title:*** college professor	***Prerequisite:*** Mathematics I. sign	

Subject content:

Introduction of complex numbers. The most important types of ordinary differential equations and construction of their solutions. Basic concepts of linear algebra. Vector geometry of the 3-dimensional euclidean space. Convergence in n-dimernsional euclidean spaces. Differential calculus of functions in several variables. Geometrical problems connected to smooth curves and surfaces. Basic concepts of mathematical statistics. Construction of the line of linear regression.

Competences to be mastered:

a) knowledge

- Knowledge of general and specific mathematical and natural scientific principles, rules, relations, and procedures as required to pursue activities in the special field of product design.

Bibliography:

1. Anton, H., Rorres, C.: Elementary Linear Algebra with Applications, 9e, Wiley, 2005, ISBN: 0-471-66959-8.
2. Thomas, G.B. et al.: Thomas' Calculus, 11e, Addison-Wesley, 2005, ISBN: 0-321-18558-7.
3. Scharnitzky V. (szerk) Matematikai feladatok, Tankönyvkiadó, 1989.