MILITARU, Romulus; CĂLIN, Liviu-Adrian; CĂLUGĂRU, George-Cristian; GEORGESCU, Adrian, *NUMERICAL ENGINEERING SOFTWARE*

Abstract: The Numerical Engineering Software represents an integrated solution for the implementation of a various number of numerical methods in order to obtain viable results to technical problems as fast as possible. The software focuses on the following topics: Matrix Algebra, Interpolation and Polynomial Approximation, Locating Roots of Equations, Numerical Integration and Initial Value Problems for Ordinary Differential Equations. The key features of this project are: the adjustable accuracy of computation, algorithms selection on computational cost criteria and ease of use (no programming abilities required)

Keywords: linear systems, eigenvalues and eigenvectors, interpolation, numerical integration, Cauchy problems.