









## Faculty of Industrial Engineering & Robotics and



Center for Research and Training in Innovative Techniques of Applied Mathematics in Engineering *Traian Lalescu* (*CiTi*)

organise in blended learning format between 27 June – 11 July, 2022, the Summer School MATH4ENG

in the framework of the Erasmus + Project
ThinkBS: Basic Sciences in Engineering Education

ThinkBS is an European Project implemented in a partnership of four universities from Turkey, Spain, Romania and Hungary aiming to improve applied mathematics skills of students and graduates in the field of engineering sciences.

Between June, the 27th and July, the 11th, 2022, courses and applications are presented, as follows:

Day	Sectiune	Profesor
27.06.2022	Registration and organisation	
28.06.2022	Linear Programming in Optimization Problems	
	Optimization of Transport and Assignment Activities	Ovidiu BLAJINA
29.06.2022	Cryptology: from theory to practice, an integrated	Emil SIMION
	view	
30.06.2022	Advanced Statistical Methods and Algorithms with	Raluca PURNICHESCU-
	Applications in Engineering and Medicine	PURTAN
01.07.2022	Innovative techniques for data security. Applied cryptography in information security	Emil SIMION
04.07.2022	Innovative mathematical modeling techniques: fractional calculus, wavelet analysis, and estimating of nonlinearities	Simona BIBIC, Corina CIPU, Mihai REBENCIUC
05.07-09.07	Projects and applications	All professors schedule tutorials and consultancy for students
11.07	Projects presentation	Committee

All modules will be teached in English for 6 hours daily followed by individual and/or teamwork. Participants will receive a Certificate of Attendance including the Summer School details and the Erasmus + European project context.

The modules target students, PhD students, specialits interested in mathematics applications in the fields of engineering and applied sciences. For bachelor students (2nd and 3rd year), attendance may be considered as part of the summer internship and graded accordingly (no math exam ②). Projects and applications will be customised in line with the students level so as to acquire technical and transversal skills and promote teamwork. In total, the Summer School activity facilitates for students a practical stage of 90 hours of activity, respectively 4 ECTS.

Registration is open by email at : <a href="mailto:cristina\_dijmarescu@yahoo.com">cristina\_dijmarescu@yahoo.com</a>





