



INSTEAD VI - Workshop on Innovative Teaching Methodologies for Math Courses on Engineering Degrees

Zoom links:	Thursday, June 25 th	Friday, June 26th	
TIME (GMT+1)			
9:00-9:15		Registration	
9:15-9:30	Registration	Session 4 Chairs: Maria Manuel Nascimento, Filomena de Oliveira Soares	
9:30-9:45	Opening ceremony	The Show Must Go On II: Statistics in Higher Education <i>Maria Manuel Nascimento, Eva Morais</i>	
	Session 1 Chair: Noah Dana-Picard, Zsolt Lavicza	The realities of developing a new Online Engineering Mathematics Course. Ana Paula Lopes, Filomena Soares	
9:45-10:00	STEAM Education: technological skills, students' cultural background and Covid-19 crisis. Thierry Dana-Picard and Sara Hershkovitz	Mapping Pedagogy to ePedagogy in Engineering Courses Ken Brown	
10:00-10:15	Technological and pedagogical innovations through STEAM education Zsolt Lavicza	3D Printing Supported Mathematical Lessons as a Base for Learning Concepts of Sustainable Energy Natalija Budinski, Zsolt Lavicza	
10:15-10:30	Synergies in Action in Finland and Around the World: Extending STEM to STEAM in Key Competence Development for Primary and Secondary School Students Kristóf Fenyvesi	The combined use of digital and physical resources to explore cube cross-sections Renáta Vágová	

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10:30-10:45	Break	Break		
	Session 2 Chairs: Viola Larionova, Daniela Velichová	Session 5 Chair: Araceli Queiruga-Dios, Deolinda Rasteiro		
10:45-11:00	The use of augmented reality, digital and physical modelling of geometric shapes to foster process related skills in special needs education in elementary schools. Haas Ben, Zsolt Lavicza, Yves Kreis	GeoGebra the New Language for the Third Millennium. Valerian Antohe		
11:00-11:15	Best Practices in Using Online Technologies for teaching Engineering mechanics Viola Larionova	Physical and Digital Transformation using Augmented Reality and 3D Shereen El Bedewy, Zsolt Lavicza		
11:15-11:30	Dynamics in mathematics, boost of students' activation Daniela Velichová	Prototyping Korean cultural heritage in mathematics perspective for STEAM education Kyeongsik Choi and Zsolt Lavicza		
11:30-11:45	EduScrum in math: sprints through vectors to complex numbers Ana Luther	An APOS theoretic analysis of students math project work Amartuvshin Amarzaya, Davaanyam Tumenbayar, Tserendorj Navchaa		
11:45-12:00	Card Magic as a source of examples in Mathematics Fernando Blasco	Online applications for practical classes Gustavo Alves		
12:00-12:15	Didactic Engineering applied in the study and teaching of Jacobsthal sequence Paula Catarino	Mathematica webcams: you are concerned! Christian Mercat		
12:15-12:30	Teaching linear algebra in engineering courses using critical thinking <i>Paulo Vasco</i>	MUSICAL INTERLUDE - TufeISEP		

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12:30-14:15	Lunch	Closing Ceremony
14:00-14:10	MUSICAL INTERLUDE - TAISEP	
14:15-14:30	Openning Round table President of the Polytechnic Institute of Porto, <i>João Rocha</i>	
14:30-16:00	Round Table "The Essential Skills of Engineering Students for Industry 5.0 and Challenges from Online Education".	
16:00-16:15	Break	
	Session 3 Chair: Jorge Mendonça, Lurdes Babo	
16:15-16:30	Teaching to Learn or Learning to Teach? Filomena de Oliveira Soares	
16:30-16:45	Get the key to unlock a paddle: could we learn maths playing games? Araceli Queiruga Dios	
16:45-17:00	Assessing Knowledge and Competencies: Rules_Math Project Deolinda Dias Rasteiro	

OPORTO TOURISM

ISEP - School of Engineering, Polytechnic of Porto