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| Titolo | Trends in Educational Activity in the Field of Mechanism and Machine Theory (2018–2022) [[electronic resource]] : Selected Papers from ISEMMS 2022 // edited by Juan Carlos García Prada, Cristina Castejon, Jose Ignacio Pedrero Moya |
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| Collana | Mechanisms and Machine Science, , 2211-0992 ; ; 128 |
| Disciplina | 511.3 |
| Soggetti | Manufactures Industrial engineering Production engineering Machines, Tools, Processes Industrial and Production Engineering |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Plans for a Course on the History of Mechanisms and Machine Science -- Teaching concept for the practical application of product development and project management methods -- Guizzo Xp: a Robotic Toolkit for STEM Education and Raising Awareness of Aquatic Environment Protection -- Kinematical analysis and dimensional synthesis of RRPR-type four-bar mechanism in MMS study course -- Developing students' cognitive skills in MMS study course -- Robotic Systems as a Part of AI Fundamentals Course at ITS Academy Foundation for New Life Technologies n.a. Alessandro Volta in Trieste, Italy -- A distance teaching experience in gear design with Autodesk Inventor -- Flipped Classroom and Technology Enhanced Learning in Mechanical Engineering -- New formative evaluation methodology on rotating machinery diagnostics -- Has the Teaching Innovation Carried Out During the Pandemic Been Consolidated? DEM-UPC Subjects -- Application of reverse engineering to implement 3D designs of ancient mechanisms -- Implementation of Audiovisual Material in Lab Sessions during COVID Time: Effects and Results -- Flipped Learning Applied to |

Machine Design -- Influence of continuous assessment test methodology on the learning of basic mechanical physics knowledge -- Implementation of Projects Oriented Learning in Mechanical Engineering Universities and Vocational Colleges -- Learning how to design and manufacture by applying hot wire cutting to the fabrication of a car spoiler -- Methodological approach for interdisciplinary teaching of machines and mechanism in real contexts -- A European Researchers' Night project on mechanical vibrations for high school students -- Matlab app for teaching planar mechanism kinematics -- Evaluation of audiovisual guides for laboratory classes in hydraulic machinery courses of distance learning engineering programs -- Dimensional Synthesis Approach of a Compliant Clutch Mechanism for a Formula Student Car (I) -- Dimensional Synthesis Solution of a Compliant Clutch Mechanism for a Formula Student Car(II) -- General-purpose software tools in teaching MMS -- The potential of education and training in additive manufacturing.

Sommario/riassunto

This book presents content from the Third International Symposium on the Education in Mechanism and Machine Science (ISEMMS 2022). Among others, the chapters report on mechanical engineering education, mechanism and machine science in the mechanical engineer curricula, methodology, virtual laboratories and new laws. Special attention is given to MMS experiences in Pandemic times. The chapters discuss the current problems in MMS education with the aim of providing solutions and identifying appropriate trends for a modern world common vision in the Engineering education field.
