

Empowering Engineering Education: Breaking barriers through research and innovation

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799 Engineering the Future: Student Perceptions on Soft Skills and Lifelong Learning in Electronic Engineering Education	
800 Differential analysis of heart rate, facial expressions and brain wave during learning of visual- and text-based languages	
801 Application of the COIL methodology to learn about clean and affordable energy in the Metaverse.	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): HYBRID SPANISH Technical Session #5
802 Sensitive Similarity on Programming Assessments Expecting Highly Similar Submissions	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #9
803 Using MaxDiff analysis to measure employer satisfaction of engineering graduates	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE SPANISH Technical Session #6
805 Work in progress:Use of natural language processing in the evaluation of university satisfaction level	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE SPANISH Technical Session #6
807 Work in Progress: Learning by Doing and Maker Movement in Engineering Education, A Student Group's Experience	
810 Empowering Engineering Students' Math Literacy with Digital Escape Rooms	TUESDAY, 12 March 2024 (4:30PM-6:00PM): HYBRID ENGLISH Technical Session #7
815 Work in Progress: Utilizing Decision Tree Analysis for Engineering Students' GPA Prediction	TUESDAY, 12 March 2024 (4:30PM-6:00PM): HYBRID ENGLISH Technical Session #7
817 Learning based on artificial intelligence for engineering courses	MONDAY, 11 March 2024 (4:30PM-6:00PM): HYBRID SPANISH Technical Session #1
818 Mapping Curricula to Skills and Occupations Using Course Descriptions	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE ENGLISH Technical Session #2
819 Teaching Robotic Concepts Using Project-Based Learning: A Case Study	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #4
821 Comparing trainee learning(experience) graphs, to understand and compare training systems – hDAS Phase One.	
824 Reconfiguring Teacher Professionality in Higher Education in Portugal: A Case Study on Pedagogical Innovation and Hybrid Learning	



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825 Work in Progress: Development of Auto Grader for Explanation of Software Design Patterns - Initial Evaluation	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #9
828 Work in Progress: Insights from Collaborative Learning and Research Innovation at Tecnologico de Monterrey	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #4
829 Python OCTS: Design, Implementation, and Evaluation of an Online Coding Tutorial System Prototype	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #10
832 Work in progress: Leveraging Virtual Escape Rooms for Innovative Computer Programming Learning Environments	
833 WIP: Intersectionality, competences and engineering: an exploratory study in Tec21	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #6
834 The academical and emotional impact of extracurricular activities on engineering college students	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #4
835 Work in Progress: A Proposed Method for Mechanical Engineering Students with CAD Simulations for Real Machines	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #4
836 Reflection on the use of Generative Language Models as a tool for teaching design	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE PORTUGUESE Technical Session #1
837 Plenary I: Empowering Engineering Education: Breaking barriers through research and innovation	MONDAY, 11 March 2024 (09:00AM-10:30AM): HYBRID ENGLISH Plenary #1
838 Entailing Security Mindset in Foundational CS Courses: An Interactive Approach	TUESDAY, 12 March 2024 (2:30PM-4:00PM): HYBRID ENGLISH Technical Session #3
839 GOLDi Labs as fully integrated Learning Environment	TUESDAY, 12 March 2024 (2:30PM-4:00PM): HYBRID ENGLISH Technical Session #3
842 Research Supervision Framework: A Student's Experience	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #11
844 Enhanced Learner Interactions and Academic Integrity with Bespoke Interactive Online Tutorials in a Hybrid Learning Model	
845 Industrial Companies Inside University Courses	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE ENGLISH Technical Session #12



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847 Discovering Programming Talent and Improving Learning Motivation with CodeCombat in K-12 Education	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE ENGLISH Technical Session #2
848 Course Construction of Cutting-edge Intelligent Manufacturing for Software Engineering	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #9
849 Streamlining TeachingVideos and Online Materials to Meet the Takt Time Required by the Class Hours	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #9
851 Investigating the Effect of the Serious Game CodeCombat on Cognitive Load in Python Programming Education	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE ENGLISH Technical Session #2
852 Workshop: Culturally Relevant Pedagogy	SUNDAY, 10 March 2024 (2:30PM-6:00PM): HYBRID SPANISH Workshop #3
853 Promoting Sustainable Research Collaborations Between HEI and Industry at the Regional Level: Brief Overview of the Case Study of Famalicão Made In	
854 Academy's Role in Fostering Lifelong Learning and Self-Development in a Knowledge-Based Society	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): HYBRID SPANISH Technical Session #5
856 Lessons learned from a successful first time ABET accreditation of three engineering programs	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #11
857 Building an Hybrid Distance Learning Infrastructure for Higher Education: Combination of Internet and an Overlay VxLAN Network Controlled by Floodlight.	
858 Work in Progress: Innovation and Technology Management Key Topics for Engineering Graduate Education	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #5
861 Ball Launching Mechanism as a Comprehensive Platform for a Mechatronics Design Course	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE ENGLISH Technical Session #12
862 Digital Citizenship in Brazil - Insights from a Workshop to Inspire K-8 Teachers	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #5
863 Fostering professional skill development through University-School interaction and game based-learning	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE PORTUGUESE Technical Session #1



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866 Work in progress: Rubrics to Assess Learning Effectiveness of Artificial Intelligence Education for K-12	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE ENGLISH Technical Session #1
867 Navigating the New Normal: Student Perspectives on Transitioning from Online to Face-to-Face Learning after COVID-19 Lockdowns	
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869 A Review on the Importance of Article Writing for Engineering Students	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH Technical Session #11
870 Work in Progress: Enhancing Engineering Students' Learning in PjBL Courses through Electronic Testing Kits	
873 Social Impact of Technical Innovations on Society: A Study of Educational Needs in Polish Universities	WEDNESDAY, 13 March 2024 (09:00AM-10:30AM): HYBRID ENGLISH Technical Session #8
875 Work in Progress: Impact of Design Thinking on Creativity Amongst First-Year Undergraduate Engineering Students	
876 Work in Progress: Applying Learning Energy Efficiency Networks Methodology in an Energy Management Course	
877 A Psycho-Pedagogical Evaluation of Well-Being Levels: A Study with Aspirants to an Engineering Career	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #2
878 Academic Self-Efficacy According to the University Selected to Study: A Comparative Study with Aspirants to Engineering Careers	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #2
879 Generative Artificial Intelligence Impact on Education and Industry: An Ethical Dimension	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #3
881 Use of Artificial Intelligence in Electronic Engineering students of Research Program III	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #3
882 Selection of the most influential ICT to improve the development of teaching in Peru using AHP methodology	



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884 Analysis of Student Dropout in Industrial Engineering Students Using Computational Intelligence Techniques	MONDAY, 11 March 2024 (4:30PM-6:00PM): HYBRID SPANISH Technical Session #1
886 Workshop: Applications of IOT for non interconnected zones	SUNDAY, 10 March 2024 (09:00AM-10:30AM): ONLINE ENGLISH and SPANISH Workshop #1
888 Exploring STEM adolescent education, using Project based learning and Gamification	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE ENGLISH Technical Session #12
890 Adaptive Learning in Engineering Courses: How Artificial Intelligence (AI) Can Improve Academic Outcomes	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE PORTUGUESE Technical Session #1
891 Comparison of class hours taught in six Metallurgical Engineering courses	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE ENGLISH Technical Session #12
892 Work in Progress: Building Bridges Between Multidisciplinary STEAM Researches	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #4
893 Exploring Educators' Perceptions: Artificial Intelligence Integration in Higher Education	MONDAY, 11 March 2024 (4:30PM-6:00PM): HYBRID SPANISH Technical Session #1
894 Model for the selection of virtual educational tools in university leveling cycles in engineering using AHP	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #3
895 Challenges for education in the new era: education and training in Industry 5.0 roles	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #4
896 A Scoping Review and Bibliometric Analysis of BBC Micro: Bit Research	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #6
898 Beyond class activities to involve Women. Fab Lab-Based Learning in Latin America	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #6
900 A Scoping Review and Bibliometric Analysis of Strategies to Increase Girls' Motivation in STEM	TUESDAY, 12 March 2024 (2:30PM-4:00PM): ONLINE ENGLISH Technical Session #6
904 Mastering Ethical Horizons: Exploring Al Integration in Advanced Studies of Engineering, Technology, and Informatics	
905 Implementation of the AlScrum-Sprint Methodology for Problem Solving in Small and Medium Enterprises within the Framework of Algorithm and Programming Courses	



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906 K-12 STEAM Education in Latin America: A Systematic Review	MONDAY, 11 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #2
907 Introducing Data Science to Spanish Speaker Students Using the TCLab Arduino Kit	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): ONLINE SPANISH Technical Session #6
908 Work in Progress: Culturally Relevant Pedagogy in Engineering: Understanding Faculty Perceptions	WEDNESDAY, 13 March 2024 (11:00AM-12:30AM): HYBRID SPANISH Technical Session #5
909 Bioethics for Engineering Research	TUESDAY, 12 March 2024 (4:30PM-6:00PM): ONLINE SPANISH Technical Session #4
910 Design of rubrics for the evaluation of research work in the Capstone Project subject of an Electronic Engineering Program	
911 Workshop: Educational Innovation through Generative Artificial Intelligence: Tools, Opportunities, and Challenges	
912 Plenary III: Developing communication and teamwork skills in students of the first semester of engineering	MONDAY, 11 March 2024 (2:30PM-4:00PM): ONLINE SPANISH Plenary #3
913 Round Table: IEEE Division 6 Societies Empowering Engineering Education	TUESDAY, 12 March 2024 (11:00AM-12:30PM): ONLINE ENGLISH Panel #1
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915 Plenary V: Unveiling the Impact of MATH 101 in Addressing Secondary Education Challenges	WEDNESDAY, 13 March 2024 (2:30PM-4:00PM): HYBRID SPANISH Plenary #5
916 Plenary II: Modernizing collaborative digital education in emerging regions with active learning methodologies	MONDAY, 11 March 2024 (11:00AM-12:30PM): ONLINE ENGLISH Plenary #2