



**CALL FOR PAPERS**

**SPECIAL ISSUE ON**

**Reconsidering Engineering Education: Embracing the Continuum from  
Emergency Remote Teaching to Future Learning Paradigms**

**Guest Editors**

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The recent global confinement, due to the outbreak of the SARS-CoV-2 and the related COVID-19 pandemic, forced educators worldwide to reinvent their daily practice and educational methods, shifting to an emergency remote teaching paradigm, which lasted for almost two years. Higher education in general greatly benefits from face-to-face interactions between students and professors, for making the educational experience more effective, efficient and human. However, the mentioned change of model proved particularly challenging for engineering and STEAM education.

Indeed, in the case of engineering, the fundamental relevance of hands-on activities, of practical tasks in workshops and laboratories and of employing physical software and hardware resources in collaborative working environments, among others, made emergency remote teaching especially arduous. Despite the difficulties, both students and educators did their best and extremely interesting educational approaches and supporting technologies were developed in a very short period of time, which contributed to engineering education reaching everywhere in a remarkable way.

At that moment, the feeling was that those educational transformations, including really varied e-learning, b-learning and m-learning methodologies, were here to stay. Quite the opposite has happened: in fewer than three years many useful techniques have been almost discarded despite their benefits as a complement to traditional educational strategies. At the same time, the fruitful wave of educational innovation applied for facing emergency remote education seems to have declined. The general return to onsite education is of course beneficial, but the relaxing of the educational debate, especially in engineering, is concerning.

In order to analyze the current post-pandemic situation in engineering education, to gather the more relevant lessons learned, to verify the long-term viability of several transformations performed during the global confinement and to check their impact on a more equitable engineering education, reaching everywhere, including remote regions and emergency situations like pandemics or ongoing wars, we propose the present IJEE special issue on: *Reimagining Engineering Education: Embracing the Continuum from Emergency Remote Teaching to Future Learning Paradigms*.

This special issue offers a panoramic view of these changes, their impact, and their sustainability, thus providing a crucial knowledge repository for educators, policymakers, and researchers.

The scope of this special issue is comprehensive, extending from institutional and departmental adaptations to the individual experiences of students and faculty, as well as course-specific developments. In doing so, it will chronicle the evolution of engineering and STEAM education in the era of COVID-19 and beyond, documenting the lessons learned, the challenges that persist, and the prospects for a more equitable and accessible education. Through this collaborative exploration, we aim to not only capture the essence of the educational transformations but also to facilitate a dialogue on how these lessons can be integrated into a more resilient and effective educational model for the future.

We seek original research papers, case studies, and comprehensive reviews that address the following areas:

- Reflections on the shift to emergency remote teaching and its immediate outcomes.
- Critical assessments of the pedagogical innovations during the pandemic and their sustainability.
- Insights into the long-term impacts of COVID-19 on teaching methodologies and curriculum design.
- Evaluations of the transition back to in-person instruction and the integration of remote teaching practices.
- Analyses of the accessibility and equity challenges in engineering education exacerbated or addressed during the pandemic.
- Future forecasts of engineering education considering recent experiences and technological advancements.
- Studies of faculty development needs unveiled by the recent emergency remote teaching.

### **Important Deadlines**

Submission of a complete manuscript:	March 31 <sup>st</sup> , 2024.
Notification of reviewers' feedback:	April 30 <sup>th</sup> , 2024
Submission of revised manuscript:	May 31 <sup>st</sup> , 2024.
Notification of reviewers' feedback:	June 30 <sup>th</sup> , 2024.
Submission of the final manuscript:	June 30 <sup>th</sup> , 2024.

**Submissions are to be sent by e-mail in MSWord to: Prof. Dr. Roberto Baelo:**  
[roberto.baelo@unileon.es](mailto:roberto.baelo@unileon.es)

Manuscripts should be written in English and limited to 12 one-sided, one-column, single-spaced pages. Manuscripts should include keywords, complete affiliation addresses and short biographies of the authors, and citing and listing of references should be in the IJEE style. Figures and illustrations should be suitable for non-color printing.

The IJEE Guide for Authors is available online and at the end of the print issues.

More information and guidelines are available at the IJEE web site: <https://www.ijee.ie/>

**Note:** The IJEE has published a three-part special issue (37-6, 38-2, and 38-5B) related to the current special issue; please see: <https://www.ijee.ie/contents/c370621.html> ;  
<https://www.ijee.ie/contents/c380222.html>; <https://www.ijee.ie/contents/c380522B.html>