



Didactic transformations of the distance educational process in universities in engineering in (post) pandemic times

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Abstract

As university education and, in particular, initial training of engineers are the priority directions of strategic development at the national and European level, in the current epidemiological conditions it is clear the need to support the digital transformation of the traditional engineering university education system into a valid one to be implemented remotely. In order to solve the problems listed above, within the call "Offers of research-innovation solutions on combating and mitigating the impact of the COVID-19 pandemic", launched by the National Agency for Research and Development of the Republic of Moldova, a team of researchers from the Technical University of Moldova (TUM) initiated a project, called DIGIFORME, which aims to develop solutions of an institutional, informational and methodological nature corresponding to the curricular specificities of engineering and technological specialties within the beneficiary university, such as laboratories remote, simulation laboratories, methods and algorithms for analyzing the interaction between the actors of the teaching process, etc. This research comes with the description of a viable didactic model to be implemented in the educational process in universities in engineering both in a pandemic context and in a post-pandemic context. The model design and



analyzed by the author provides for the implementation of certain methodological digital transformations, the presence of which is argued both from a theoretical and applied perspective of teaching-learning-evaluation of engineering disciplines in a distance learning format. The solutions presented in the article are meant to reduce the vulnerabilities of a university with a profile in engineering education, such as the lack of a basis for carrying out distance work with students (from all types of studies); insufficient training of teachers for the full conduct of online lessons; the inadequacy of the informational and methodological support for the number of didactic activities specific to the specialties with engineering and technological profile. In the conclusion of the research, the author outlines the perspectives of capitalizing the experience of the TUM based on the given didactical model.

Keywords: didactic, digital didactics, distance education, e-learning, online teaching, online learning