Proceedings - 32nd IEEE International Conference on Advanced Information Networking and Applications Workshops, WAINA 2018, 2018, vol.2018-January, pages 319-324

Blended learning technologies in the automotive industry specialists' training

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Abstract

© 2018 IEEE. Today, business requires engineers with sufficient level of professionalism that mean not only high qualification, but also that students must be able to use personal, interpersonal and system competences in professional sphere. Therefore the system of engineering education in the 21st century should embrace the innovative principles, methods and teaching technologies. The analysis of applied forms of education shows that Blended Learning has advantages over traditional learning and E-Learning. For its successful implementation an intelligent learning environment, including such technologies, as gamification, virtual and augmented reality, has to be created. The specific feature of proposed approach is to use such modeling environment and software tools for education process, which are applied at manufacturing site as well as allow to model the systems, with which the future engineer will work in practices. Examples of interaction between Kazan Federal University and the Public Corporation 'KAMAZ' in engineers training are presented.

http://dx.doi.org/10.1109/WAINA.2018.00105

Keywords

Blended learning, E-learning, Engineering education, Gamification, Smart education, Virtual reality

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