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Institute of Information and Computational Technologies

ABSTRACTS

International Conference
"Computational and Informational Technologies
in Science, Engineering and Education"

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The book contains abstracts of the participants of the International Conference "Computational and Informational Technologies in Science, Engineering and Education". The proceeding of the Conference will be beneficial for specialists in the field of Mathematics and its applications, as well as for students, undergraduates, doctoral students majoring Computational and Informational Technologies.

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Database design for the sectoral frame of IT qualifications within TEMPUS project "QUADRIGA"

One of priority objective of Tempus project "QUADRIGA" is development of the project of a sectoral frame of qualifications (SFQ) in the field of information technologies on the basis of the All-European recommended frame and taking into account experience of the European and Russian higher education institutions. Implementation of the project will allow to provide a basis for modernization of educational programs, to promote closer cooperation and mutual understanding between universities and employers (the enterprises, industries, public sector) that will be useful to graduates of higher educational institutions of Central Asia and will allow to strengthen the Centers of Career in higher education institutions of Central Asia for expansion of opportunities of graduates in employment and creation of high-quality employment. Today participants of the project developed the project of a database for a sectoral frame of qualifications taking into account influence of professional competences on formation of the contents, the purposes and problems of disciplines of higher educational institutions. Thanks to the developed structure of a database it is possible to track interrelation between the labor functions, necessary for successful work in sector of IT technologies, and educational competences of discipline; to see and estimate process of formation of professional competences of the graduate of a higher educational institution; to define the education level demanded for assimilation of necessary skills (undergraduate studies, magistracy, PhD doctoral studies), etc. In the future the team of the QUADRIGA developers will make an attempt to use this database for development of an educational program of IT specialties.

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