

# Theoretical and Practical Components in the IT-Specialists Training

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We have studied the role of information technology in the development of the country's economy and ensuring its defense and security. We have analyzed the problematic issues of training IT-specialists, including the relationship between theoretical and practical components in the training of specialists of this profile in higher educational institutions of the Russian Federation. As an example, we have considered the system for studying information technology at the N.E. Bauman Moscow State Technical University. Based on the results of the study, we were convinced that in the field of information technology, a system for training specialists is required. It must provide the relationship between the theoretical and practical components of the educational process; FSES compliance with the needs of practice; training of specialists of different skill levels capable of prompt retraining based on the needs for new technologies; the relationship of specialties and areas of training of higher education for undergraduate, specialist and master's programs with scientific specialties, for which the degrees of candidate and doctor of science are awarded.

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