CONCEPT OF TRAINING IT PROFESSIONALS BASING ON CROSS-CUTTING DIGITAL TECHNOLOGIES

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Currently there is a severe shortage of IT experts required for the development of national projects in Russia. The rapid digitalization of the economy requires qualified experts. The Government of the Russian Federation has formed a national program "Digital Economy of the Russian Federation", one of the goals of which is to solve the issue of ensuring the accelerated introduction of digital technologies in the economy and social sphere [1]. A number of federal projects are being developed within the framework of this program: "Normative Regulation of the Digital Environment", "Human Resources for the Digital Economy", "Information Infrastructure", "Information Security", "Digital Technologies", "Digital Public Administration", "Artificial Intelligence". The main goal of the federal project "Human Resources for the Digital Economy" is to provide training of highly qualified personnel for the digital economy. It is achieved through performing several tasks, in particular: meeting the labor market needs for experts in the field of IT and information security, as well as for experts with digital competencies who have been trained in the relevant programs of higher and secondary vocational education. The emergence of the new generation digital technologies, which were called "cross-cutting" due to the scale and depth of impact, determined a large-scale transformation of business and social sphere models. These changes have a strong impact on the content of professional activities: employees are required to have new skills and, consequently, new competencies. Formation of educational programs that meet global trends, taking into account the most popular technologies, has the particular importance. These technologies and their subtechnologies are described in roadmaps created within the framework of the national program "Digital Economy of the Russian Federation": neurotechnologies and artificial intelligence, virtual and augmented reality technologies, distributed ledger technologies, quantum technologies, new production technologies, robotics and sensorics components, wireless communication technologies. Thus, in connection with the transition to the digital economy, professional education faced challenging tasks. In response to these challenges, the Institute for Systems Analysis and Management of Dubna State University adopted and develops a teaching concept that allows to combine traditional methods and approaches in the educational process with innovative digital solutions and tools.

References

1. Passport of the national project "National Program "Digital Economy of the Russian Federation" (approved by the Presidium of the Council under the President of the Russian Federation for Strategic Development and National Projects, minutes of 06/04/2019 N 7) // Access from the reference legal system "ConsultantPlus" http://www.consultant.ru/.