

Review

of the educational and professional program "Metrology, Information and Measurement Technology" of the first (bachelor's) level of higher education on the specialty G6 "Information-Measuring Technologies" at the Ukrainian State University of Railway Transport

The presented educational and professional program "Metrology, Information and Measurement Technology" of the first (bachelor) level of higher education demonstrates a modern approach to training future professionals in the field of information and measurement technologies. The program meets the requirements of the Law of Ukraine "On Higher Education" and the bachelor's degree standard for the specialty 152 "Metrology and Information-Measuring Technology," taking into account labor market needs and trends in the development of science and technology.

The program is designed to promote comprehensive personal development. It provides fundamental and practical knowledge in the fields of metrology, measurement technologies, and automation. Its structure includes educational components that help students to acquire basic and professional competencies essential for performing tasks in their future professional activities, especially in the context of European integration and sustainable development.

The curriculum of the program reveals high consistency and balanced selection of disciplines. It includes mandatory courses that provide the foundations of engineering training, as well as elective subjects that allow students to deepen their knowledge in specific areas. Importantly, in the program, attention is paid to integration of theoretical knowledge with practical experience. The practical component of the program is implemented through laboratory work, course projects, and industrial internships conducted at partner enterprises of the university.

One of the noteworthy advantages of the program is its focus on development of interdisciplinary competencies. It is necessary for solving wide range of the tasks related to ensuring measurement accuracy, implementing automated control systems, and appropriate data analysis. This approach creates broad employment opportunities for graduates in various sectors of the economy, such as transportation, mechanical engineering, energy, telecommunications, etc.

The program also fosters students' ability to engage in self-directed learning, critical thinking, cooperation in teams, and readiness for further professional growth. The use of modern information technologies and educational resources ensures a high-quality learning process.

Graduates of the program will be able to apply the acquired knowledge to develop, implement, and maintain modern measurement systems, work with regulatory documentation in the field of metrology, and ensure product quality throughout its lifecycle, according to the European standards and requirements.

Overall, the educational and professional program "Metrology, Information and Measurement Technology" meets the requirements of contemporary bachelor degree training in the field of information and measuring technologies. It creates the necessary conditions for quality education, professional development, and future career advancement of graduates. The program can be recommended for implementation at the Ukrainian State University of Railway Transport.

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