

REVIEW
for the educational program 6B07109 “Engineering Physics and Materials Science”
(Bachelor’s degree)

The evaluation of the bachelor’s educational program (EP) 6B07109 “Engineering Physics and Materials Science” was conducted to assess its academic quality, relevance to contemporary scientific and technological challenges, and alignment with international standards in engineering and materials science education.

The program demonstrates a well-structured academic framework that effectively integrates fundamental physics knowledge with applied materials science and engineering disciplines. The curriculum provides students with a strong theoretical foundation complemented by practical and laboratory-based training, which is essential for preparing highly qualified specialists capable of contributing to modern technological industries.

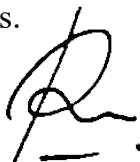
The objectives and learning outcomes of the educational program are clearly articulated and focus on developing analytical thinking, engineering problem-solving skills, and the ability to apply modern scientific methods to the study and development of advanced materials. Students acquire knowledge in key areas, including solid-state physics, materials science fundamentals, physical methods of materials analysis, nanomaterials, functional materials, and modern materials technologies.

The program places considerable emphasis on laboratory work and experimental research, enabling students to gain hands-on experience with modern analytical and characterization techniques. These include electron microscopy, X-ray diffraction (XRD) analysis, spectroscopy, thermal analysis, and other instrumental methods widely applied in contemporary materials research.

Another notable strength of the educational program is its interdisciplinary orientation, which integrates elements of physics, chemistry, and engineering. This integrative approach reflects current global trends in materials science education and equips graduates with the flexibility required to adapt to rapidly evolving technological environments.

The curriculum also incorporates components to develop essential soft skills, including teamwork, communication, project management, and academic integrity. These competencies are crucial for successful professional engagement in both research and industrial sectors.

Based on the analysis of the program structure, curriculum content, and expected learning outcomes, it can be concluded that the bachelor’s educational program 6B07109 “Engineering Physics and Materials Science” meets contemporary educational standards and provides a solid foundation for further academic advancement at the master’s and doctoral levels, as well as for professional careers in science- and technology-driven industries.



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