



## PASSPORT OF THE EDUCATIONAL PROGRAM

### • 6B05302-Physics

<b>Purpose of the educational program</b>	Training of highly qualified specialists in the field of modern physics, based on a combination of intensive fundamental training of students in general, computational, theoretical physics with their phased inclusion in research work.
<b>Area of professional activity</b>	Research activities (work) in institutes and laboratories, for work in enterprises and associations in order to ensure production and technological processes, as well as production and management processes in firms and companies in the positions: junior researcher, senior laboratory assistant

## Learning outcomes

**LO 1** - communicate and express in ways of organizing professional activities in a multicultural environment, taking into account ethnocultural and confessional differences and characteristics of the socio-cultural structure of society;

**LO 2** - owns key concepts and a set of scientific knowledge of the development of a market economy and political processes, understands the new philosophy of upbringing and education of the younger generation, entrepreneurial and innovative investment activity;

**LO 3** - solve practical problems that contribute to the formation of a highly educated personality with a broad outlook and a culture of thinking, striving to lead a healthy lifestyle and instill in the younger generation the desire;

**LO 4** - communicate, explain your point of view, solve real problems in specific speech situations of the scientific sphere using the linguistic means of the state, Russian and foreign languages;

**LO 5** - demonstrates a comprehensive understanding of the fundamental laws of physics and various research methods used in testing scientific theories, formulates fundamental knowledge in a scientific language;

**LO 6** - applies knowledge of fundamental laws of physics in special fields of physics; selects and applies in research and professional activities the basic mathematical and computer methods used for modeling and analysis of physical processes;

**LO 7** - takes a creative, research approach to scientific and pedagogical activity and is capable of abstract thinking

**LO 8** - analyzes and synthesizes, creatively transforms, illustrates information from various sources to create a product, hypothesis, systematic explanation of a phenomenon or event;

**LO 9** - compares, classifies, contrasts theoretical and experimental results in solving practical problems and evaluates their reliability;

**LO 10** - combines, uses basic theoretical knowledge to solve professional problems based on previously studied material.