



## PASSPORT OF THE EDUCATIONAL PROGRAM

### • 7M01504 - Physics

#### PURPOSE OF THE EDUCATIONAL PROGRAM

Preparation of masters of education who have basic scientific or professional training, possess modern information technologies, demonstrate a systematic understanding of the field of study, skillfully organize a scientific experiment, formalize the results of their research in publications at the national or international level and are provided with fundamental, high-quality, professional and pedagogical education, specialized knowledge in the field of physics, which allow the successful development of science.

#### FIELD OF PROFESSIONAL ACTIVITY

Education and upbringing, as well as scientific activities, government regulation related to education.

# LEARNING OUTCOMES (LO)

LO1-defines and describes phenomena, basic concepts, basic laws, and their experimental and theoretical basis from the main areas of physics;

LO2-finds examples of coordination and effective use of fundamental physical theories and the content of physical examples in other intersubject relations;

LO3-explains the facts about the accelerated expansion of the Universe, rules and principles; describes the consequences of the theory of the birth of the Universe, resulting from the available data;

LO4-conducts scientific observations of physical processes, uses the apparatus to collect experimental data, and works using physical equipment;

LO5-analyzes scientific and technical information, study domestic and foreign experience on the subject of research;

LO6-applies the advanced experience of physics teachers in organizing experimental activities of schoolchildren and students in the educational process;

LO7-differentiates the advantages and disadvantages of the modern vacuum model of the Universe;

LO8-focuses on a wide range of new technologies, ideas, and directions and uses them in its teaching activities;

LO9-the ability to develop and improve the teaching methodology of individual issues in the science of physics;

LO10-the ability to reflexively choose and use sources of necessary information.