

DESCRIPTION OF THE EDUCATIONAL AND PROFESSIONAL PROGRAM

Field of study: 13 - Mechanical Engineering

Specialty: 132 - Materials Science

Educational Program - Engineering welding and allied processes

(Second (Master's) Level of Higher Education)

Educational Qualification: "Master of Materials Science"

Mode of Study: Full-time/Part-time

Accreditation: Available. Accredited by the National Agency for Higher Education Quality Assurance. Accreditation Certificate No. 6128, valid until November 21, 2024.

The educational and professional program defines the prerequisites for admission, the orientation and primary focus of the program, the ECTS credits required to obtain the master's degree, a list of general and specialized (professional) competencies, the normative and elective content of specialist training, formulated in terms of learning outcomes, and the requirements for quality assurance in higher education.

The aim of the educational and professional program is to train specialists capable of effectively and successfully carrying out scientific, pedagogical, and industrial activities, solving complex problems and issues related to the development, application, production and testing, and forecasting the properties of metallic, non-metallic, and composite materials and products, which involves conducting research and/or implementing innovations under uncertain conditions and requirements.

The educational program ensures the formation of the future specialist's ability to dynamically combine knowledge, skills, communication abilities, and autonomy with responsibility when solving tasks and addressing problematic issues in materials science, including the development, research, testing, and certification of welding and related technologies for the needs of industry, agriculture, energy, and research.

The objects of study of the educational and professional program are phenomena and processes related to the formation of the structure and properties of inorganic and organic materials, manufacturing, processing, operation, testing, disposal, and certification of materials and products.

Keywords: materials science, welding technologies, allied processes technological processes, product manufacturing technologies, software and computer technologies in welding and allied processes.