Graduate Model of this Educational Program
6M11201 - "Life Safety and Environmental Protection"

Upon graduation, the graduate should be able to:

Skills:

- Determine the efficiency indicators of machinery and equipment in industrial conditions.
- Apply energy- and resource-saving technologies and equipment in production environments.
- Plan and organize the technical operation of machinery and equipment in agricultural production.
- Analyze the state and development of engineering and technical services in crop production.
- Conduct experiments to evaluate hazardous industrial facilities and declare their safety.
- Classify hazardous and emergency situations of a social nature.
- Identify patterns of occurrence of emergencies of a social nature.
- Act appropriately in cases of hazardous social situations.
- Organize and competently conduct safe emergency rescue operations.
- Conduct training for rescuers involved in operations related to saving lives.
- Perform technological calculations to forecast the composition and amount of potential waste when using a specified raw material processing technology.

Knowledge and Understanding:

- Understand the structures and contents of systems for engineering and technical safety support.
- Grasp the fundamentals of research methodology, principles, and structures of organizing scientific activities.
- Recognize prospects for technical development and specifics of institutions, organizations, and enterprises.
- Comprehend the main provisions and regulatory requirements of the Constitution of the Republic of Kazakhstan and legislation related to the agricultural sector.
- Identify key issues in the field of safety and occupational health and the capabilities of modern scientific tools for their analysis and resolution.
- Apply methods and tools for conducting scientific research.
- Utilize modern technical tools, computing technologies, communication systems, and understand the trends and prospects for the development of information technologies.
- Follow rules, methods, and tools for preparing technical documentation.

- Understand the basics of economics, labor organization, production organization, and scientific research.

Competencies:

- Master the methodology of scientific research.
- Excel in scientific and academic activities at higher education institutions.
- Utilize modern educational technologies to conduct scientific projects and research in professional fields.
- Continuously update knowledge, expand professional skills, and improve abilities.
- Apply mathematical methods to solve research problems.
- Use computing technologies and software for conducting scientific research and processing data.