Graduate Model of this Educational Program 6D08701 - Agricultural Machinery and Technology

Upon graduation, the graduate should be able to: Skills:

- Apply acquired theoretical knowledge and practical skills in conducting independent fundamental and applied research.
- Formulate and solve problems arising in professional, scientific research, and pedagogical activities that require advanced professional knowledge.
- Select appropriate research methods, modify existing ones, and develop new methods based on specific research tasks.
- Process obtained results, analyze and interpret them considering available literature data.
- Present the results of completed work in the form of reports, abstracts, and articles formatted according to existing requirements.
- Apply theoretical knowledge and practical skills in independent fundamental and applied research.
- Formulate and solve tasks requiring in-depth professional knowledge during professional, scientific research, and teaching activities.
- Select necessary research methods, modify existing ones, and develop new ones tailored to specific research needs.
- Process, analyze, and interpret results in the context of existing literature.
- Present research outcomes in reports, abstracts, and articles adhering to required standards.

Knowledge and Understanding:

- International and domestic standards, regulations, development plans for the sector, decrees, orders from higher authorities, and other methodological, regulatory, and guidance materials related to performed tasks.
- Prospects for technical development and specifics of institutions, organizations, and enterprises.
- Technical characteristics of domestic and foreign models of agricultural machinery and technology.
- Key technical issues in agricultural machinery and technology and the capabilities of modern scientific tools for their analysis and resolution.
- Methods and tools for conducting scientific research in agricultural machinery and technology.
- Modern technical tools and technologies, computing systems, and trends in the development of information technologies.
- Basic requirements for labor organization in enterprises related to the operation, repair, and maintenance of agricultural machinery.
- Rules, methods, and tools for preparing technical documentation, as well as the basics of economics, labor organization, production organization, and scientific research.

Competencies:

- Conduct scientific theoretical and experimental research.
- Develop and implement comprehensive research projects.
- Implement state educational standards, curricula, and prospective study plans for bachelor's, master's, and doctoral programs in the specialty of "Agricultural Machinery and Technology."
- Utilize scientific methodologies and modern software for processing results and presenting them in various formats.
- Interpret issues related to the state's social and economic policies, economics, and management of public institutions, organizations, and enterprises in the agricultural sector.
- Plan and conduct all types of professional activities related to agricultural machinery and technology.
- Formulate hypotheses during the teaching of courses in the specialty.