implementation of this educational program is to increase the rating of KazNARU and the formation of an effective image, the maintenance of which affects the strengthening of positions in the educational services market, and indicates the level of education development in the country, which will significantly affect the image of domestic education.

As a result of the implementation of the EP Development plan, it is expected to ensure socio-economic effects:

- improving the quality of professional education and, as a result, the competitiveness of specialists in the field of agronomy;
- training graduates who meet the needs of potential employers in the agricultural sector;
- increasing the role of employers in the training of professional personnel;
- increasing the demand for qualified personnel, optimizing their age structure;
- expanding the opportunities for professional self-realization of young people;
- updating of the educational and material base (educational, laboratory, computer and technological base that meets modern requirements and standards).

The socio-economic effect of the implementation of the EP development plan will reflect the definition of stimulating parameters leading to an increase in the percentage of the department's settlement, the creation of motivation systems.

As a result of the implementation of the educational program, scientific developments and recommendations of the scientists of the department will be introduced into the educational process.

10 Graduate model for the educational program "Agronomy"

Employment of university graduates has become a key indicator of the work of universities in recent years from the standpoint of assessing the effectiveness of their functioning. At the same time, the state of the graduate employment process accumulates a whole range of issues that require solutions, including the demand for graduates in the labor market, the compliance of the level of training of specialists in higher education with the needs of the labor market, determining the directions of development of higher education and the formation of more effective mechanisms for its partnership with employers in order to improve the quality of training of specialists.

The solution of these issues is directly related to increasing the efficiency of employment of university graduates, ensuring their adaptation in the labor market, which should be based on the interaction of the higher education system and employers within the framework of further development and improvement of the labor market infrastructure, which should be aimed at comprehensive support of graduates on issues of assistance in employment and professional navigation. In this regard, the relevance of issues of increasing the efficiency of employment of KazNARU graduates increases in order to ensure the level of compliance of their training with the requirements of the agricultural sector of the economy.

One of the important factors influencing the professional training of personnel is the rapidly changing professional competencies under the influence of digitalization, which are introduced into educational standards and programs for the professional training of specialists with some delay. As a result, there is a gap in the level of competence of graduates and the requirements of employers, which characterizes the main problem of the system for training specialists with higher education: its low correlation with the requests

and needs of employers.

In recent years, the percentage of employment in the OP "Agronomy" was:

Table 5. Employment of graduates of the EP Agronomy 2024

Code and names of educational programs	Release	by specialty	not in specialty	Continues studies in master's or doctoral studies	% Total employ-ment	% by specialty	% not in specialty
6B08101-«Agronomy»	23	11	8	1	87%	61%	26%
7M08101-«Agronomy»	6	2	3	-	83%	50%	33%

The formation of the graduate model begins to take shape during the training of students, taking into account the following factors: the effectiveness of the selection of applicants; the potential of KazNARU; the content and organization of the educational process; the degree of use of advanced learning technologies; the professionally significant environment of the university, etc.

The model of a university graduate embodies the idea of a student who has completed the educational process and is a fully formed personality with not only certain competencies, but also the necessary professionally and socially significant personal qualities.

One of the fundamental approaches to creating a graduate model is the competence approach, in which competence/competence becomes the main element of the graduate's personality model.

The graduate model should serve as a basis for the organization of professional training of students at the university on an equal basis, taking into account the requirements of state standards, the possibilities and limitations of the education system, as well as the "entrance characteristics" of applicants.

Such a model should be dynamic with the constant possibility of adjustment in accordance with changes in economic sectors. To ensure the relevance of the model, the update rate of the model should not be less than the rate of change of the factors determining it.

The graduate model of a university is a rather capacious and diverse concept.

It can be defined in different ways – as:

1) a set of defining knowledge and skills acquired in the learning process;

2) an information array, the active assimilation of which is necessary for effective work in production;

3) a training system that allows graduates to successfully implement all types of business (production) contacts with the environment (information, technological, personnel, etc.);

4) a detailed description of all professional and socio-psychological qualities of a university graduate;

5) a formalized list of all job functions and responsibilities;

6) a system of skills that allow you to solve standard and non-standard situations that arise during production activities;

7) description of the personality qualities of a successful professional; his age, gender, education, work experience in the specialty, knowledge of modern information technologies, knowledge of foreign languages, etc.;

8) display of the process of interaction of certain types of trainees with a professionally significant environment.

The learning process should be structured in such a way that, given the existing characteristics of applicants, the characteristics of a university graduate are as appropriate as possible to the professional model, reflecting the current requirements for specialist training.

	Bachelor's degree	Master's degree	Philosophy Doctor degree
	6B08101-«Agronomy» EP	7M08101-«Agronomy» EP	8D08101-«Agronomy» EP
know and understand	- conducting visual observations and records of the growth and development of agricultural crops; - accounting and control over the agroecological safety of agricultural products when using herbicides, fungicides and insecticides; - accounting and analysis, their sequences, timing and duration; - rationally and effectively use land, water, forest, labor, material and other resources; - have skills in applying knowledge of the economic, political, national and cultural characteristics of countries and regions, foreign partners of agricultural activities in the Republic of Kazakhstan and international law, compliance with formalities and prescribed procedures when receiving and sending agricultural products; - develop schemes of modern crop rotation for farms and other enterprises, taking into account the specialization of farms, land and soil-climatic resources; - draw up technological maps for the cultivation of agricultural crops with the introduction of elements of innovative technologies; - calculate the need of farms for seeds, fertilizers, pesticides, fuels and lubricants, agricultural machinery and tools; - adjust agricultural machinery and equipment, set seeding rates for agricultural crops, fertilizers, pesticides, irrigation rates, etc.; - organize proper and timely post-harvest processing of grain and other agricultural products in storage facilities; - organize biotechnological processes in crop production; - organize the use of biotechnological methods in the selection and seed production of agricultural crops; - ensure the development of biotechnological processes and the	- study of modern methods of teaching disciplines in agronomy; - use of innovative teaching technologies in the process of scientific and pedagogical activity; - development of scientifically based guidelines; - laying down experiments, processing, analysis and systematization of information on the topics of the conducted research; - identification and formulation of current scientific problems and programs of scientific research in agronomy; - preparation of reports, recommendations and scientific publications on current issues of the agro-industrial complex; - organization and conduct of agrochemical analyses of plant-based feed; - organization and conduct of laboratory quality control of soils and grounds; - development of optimal sowing patterns, taking into account the characteristics of the soil, climate and plant crops to maximize yields and resource efficiency; - work with advanced methods and technologies in the field of agriculture, such as digitalization, the use of drones, sensors and automated control systems to optimize production processes; - development of business plans, analysis of the agricultural product market, optimization of logistics and supplies to increase the competitiveness of agricultural enterprises.	- identifying and formulating current scientific problems and research programs in agronomy; - laying down experiments, processing, analyzing and systematizing information on the topics of the research being conducted; -preparing reports, recommendations and scientific publications on current issues in the agro-industrial complex; - planning training sessions in accordance with the curriculum and based on its strategy; - evaluating pedagogical results; - defining specific pedagogical tasks, anticipating learning outcomes; - selecting and using appropriate teaching aids to build a teaching technology.

	production of biotechnological products for plant purposes; - be able to conduct marketing research in order to improve the efficiency of the enterprise (organization), attract investment, expand the scope of services, etc.; - plan, organize and control the activities of the enterprise, including having the skills to manage the information flow, as well as time and other resources; - assess the prospects for the development of the economy in a market environment, determine the optimal ratio of crop production and livestock farming in order to continuously maintain production and improve the efficiency of the economy.		
be competent	- have the skills to organize and develop an environmental, ecologically safe system of farming, conduct an examination of plant products for the presence of hazardous harmful substances; - have the skills to apply knowledge of the economic, political, national and cultural characteristics of countries and regions, foreign partners of agricultural activities in the Republic of Kazakhstan and international law, compliance with formalities and prescribed procedures when receiving and sending agricultural products; - have the skills to use the state, Russian, English and one more European or Asian language in professional activities, including fluency in special agricultural terms; - have a solid knowledge of the code of corporate ethics, negotiation techniques, as well as the basics of business communication.	- in the analysis of information materials in the field of agriculture and use them in their professional activities; - on issues of organizing and managing the production process; - solving production problems within the framework of the implementation of work to improve the productivity of agricultural crops and their qualities; - in the correct solution of agronomic and other issues in extreme situations; - planning and organizing the work of the nursery; - performing basic and auxiliary work on irrigation of field crops in the territory assigned to them; - regulation of the water regime of the soil during irrigation and cultivation of crop products in accordance with the needs of the crops being grown; - safety of farm equipment in the nursery, uniform distribution of resources, management of agrotechnical measures.	- plan classes in accordance with the curriculum and based on its strategy; - evaluate pedagogical results; - define specific pedagogical tasks, anticipate learning outcomes; - select and use appropriate teaching aids to build a teaching technology; - develop students' skills in working with educational, specialized, scientific literature, manuals; - teach students to independently conduct experiments and generalize the results obtained.

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