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| Educational program | 6В08102 Agronomy - Agricultural sciences and technologies |
| EP purpose | Training of highly qualified, competitive bachelor's degree specialists in the labor market, ready to solve the problems of the agricultural and agri-food industry in an innovative way and using an interdisciplinary approach |
| EP type | Innovative |
| Level on NQF | 6 |
| Level on SQF | 6 |
| The awarded academic degree | Bachelor |
| Period of study | 4 |
| Volume of the credits | 240 |
| Language of education | Kazakh, Russian, English |
| Date of approval of the OP at the Board meeting | 10.04.2024 |
| Professional standard | Cultivation of sugar beet and its seeds, Nursery garden activities, Growing vegetables and potatoes, Production of grain crops, Production of greenhouse vegetables and berries, Gardening 26.10.2022 |

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| № | Learning outcomes: |

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| 1 | Have the ability to evaluate and apply research methods and innovative approaches to understanding socially significant social phenomena and processes in the legal, economic, entrepreneurial, industrial, environmental, intercultural environment and anti-corruption policy |
| 2 | To adapt tillage systems taking into account its fertility, to assess the quality of the natural environment by chemical indicators, to predict changes in the chemical composition and properties of soils for the effective use of fertilizers and reproduction of fertility |
| 3 | To organize agrotechnical measures aimed at improving the quality of seeds, to carry out work on seed production, plant breeding and reproduction of cultivated, promising varieties, to develop measures for accelerated variety exchange and variety renewal |
| 4 | Conduct marketing research of crop production in agricultural markets, predict the agronomic and economic efficiency of using technological techniques, fertilizers, plant protection products, new varieties and innovations for planning and management of agricultural enterprises |
| 5 | To carry out a complex of comprehensive protective measures against pests, diseases and weeds, to determine the spread of plant diseases, harmful insects, pathogenic microorganisms on the basis of phytosanitary inspection of agricultural land and laboratory studies |
| 6 | To use English as a means of professional communication, to master all types of speech activity, building grammatically correct oral and written statements in English |
| 7 | Analyze genetic data using modern molecular technologies, apply cell and tissue cultures for microclonal reproduction and health improvement of plants, cell breeding, predict the consequences of the introduction of plants created by biotechnological methods |
| 8 | Conduct a comprehensive study of scientific and technical problems in the field of agronomy using modern technologies of geoinformation systems and mathematical modeling, interpret mathematical and physical models for analysis, calculation and forecasting of the results of the introduction of a highly efficient agricultural management system |
| 9 | Apply methods for recognizing the main types and assessing soil fertility, methods for protecting soils from erosion and deflation, technologies for improving agricultural land to increase the yield of cultivated crops |
| 10 | Organize the planting and care of woody and fruit trees, ornamental plants using best practices in crop production, the introduction of technologies for breeding new varieties, plant hybrids, increasing yields and product quality |
| 11 | To organize and implement measures for the rational use of agricultural land based on the assessment of soil quality, the degree of favorability of agricultural work, cadastral value |
| 12 | To introduce mechanized agricultural technologies, taking into account the characteristics of agricultural machines, their ability to work in accordance with the tasks of improving the efficiency of agricultural production and product quality |
| 13 | Apply innovative technologies for the production, processing, storage and sale of agricultural products to obtain high yields and high-quality products |
| 14 | To assess occupational risks taking into account the nature of harmful and dangerous factors of the production environment, to ensure occupational safety conditions, observing the parameters of industrial sanitation, fire protection and environmental standards |