Subjects studied at the department

Bachelor level

№	Name of the subject	Brief information about subjects
Full time training		
1.	Agricultural machines.	The subject "Agricultural Machines" teaches students the purpose, design, construction, technological process of work and adjustment of working bodies of agricultural machines for tillage, sowing seeds and planting seedlings, spreading fertilizers, combating pests, diseases and weeds of crops, harvesting and cleaning seeds .
2.	Mechanization of livestock	Basics processes of livestock production and devices, principle of operation and rules of operation of machines and equipment used in their selection and calculation machines, design of production processes.
3.	Fundaments of Agricultural Engineering	This subject provides knowledge about the fundamentals of the mechanization of agricultural production. Teaches the laws on which the device and technological processes are based, new and foreign agricultural machines. Gives knowledge of the laws aimed at the development of agriculture and agricultural engineering, as well as production processes, which are occupied by engineering personnel.
4.	Fundamentals of mechanization of primary processing and storage of agricultural products	Studying the basis of the rules of the technology used, the laws of the processes of primary processing of crop and livestock products, calculation and selection of machines and equipment, their operation
5.	Basics of Livestock	The role and importance of animal husbandry in the national economy, the origin of farm animals. Farm animal breeding methods are purebred, animal crossbreeding, and hybridization. Breeds of farm animals and birds. Fundamentals of feeding farm animals principles of compiling radians dairy meat egg wool productivity of farm animals and the production technology of milk, meat, eggs and wool Factors evoking animals on dairy meat egg wool productivity. Study of the growth and development of farm animals.
6.	Mechanization of preparation and storage of feed	Fundamentals of technological processes in the preparation and storage of feed, devices, principle of operation, rules of operation of used machines and equipment, theory and principles, design of technological processes.

7.	Precision agricultural	The science of "Fundamentals of Precise Farming" includes global distribution systems, geographic information systems, remote sensing techniques, soil analysis, precision planting, stratification and monitoring technologies used in agriculture with precise coordinates. It is intended to provide general understanding and knowledge to students of bachelor's and master's specialties on economic and environmental aspects.
8.	Innovative techniques and technologies in agriculture	The subject of "Innovative techniques and technologies in agriculture" for undergraduate students major and tillage, sowing and transplanting, intercropping, disease and pest control, harvesting and harvesting, harvesting and reaping. to gain knowledge and skills by providing insights into new innovative techniques and technologies used.

At extramural education form

10.	Machines of horticulture and vegetables	Subject "Machines of horticulture and vegetables" teaches the students of bachelor level that mechanization of horticulture and olericulture works, machines of horticulture and olericulture, their construction, working process, basing methods of technological process of the horticulture and olericulture works, principles, controlling works, sizes of equipments and implements, determining parameters and work regimes, choosing the equipments, implement as well machines according to local condition, using effectively and repairing them and how to use practically above mentioned methods.
11.	Bases of agricultural technics and technologies	Subject "Bases of agricultural technics and technologies" teaches the students of bachelor level that tasks of technics and technologies, technological work process, theoretical bases of determining parameters of machine and its working units as well using them in practice, also tillage machine, fertilizing machine, seeders, cultivators, machines that are used to struggle against diseases and vermin as well wild grasses, in addition hay, forage preparing, crop harvesting, grain cleaning and selecting, melon field, olericulture plant, fruit growing.
12.	Meadow machine	The science of "pasture machines" In order to increase the efficiency of pasture land use, it teaches the methods of tillage and the machines used in it, the sowing of desert plant seeds to enrich the vegetation of pastures, feeding, care and irrigation of plants in pastures, and harvesting machines.

Master's level

No.	Name of the subject	Brief information about subjects

1.	Theory and accounting of agricultural machines	Subject "Theory and accounting of agricultural machines" teaches the students of masters' level that mechanic and technological bases of objects that are influenced by mechanization means, types of agricultural machines, their main units' construction and working process, main and shallow tillage, fertilizing, seeding and planting as well cultivating, defending from diseases and vermin, crop harvesting, methods of primary treatment and technological work process of machines that perform them and theoretical bases of determining of the technological parameters, theoretical basing of work regime of the machines and working units, agro-technical demands to the machines that are developed
2.	New technical solutions of agricultural machines	Subject "New technical solutions of agricultural machines" teaches the students of masters' level that development of construction, technological process of the agricultural machines for tillage, seeding machines, planting mashines, fertilizing, machines that are used to struggle against diseases and vermin as well wild grasses, crop harvesting, grain cleaning and selecting, determining of parameters of the working units, development of new solutions for agricultural machines, substantiation of new developed technical solutions and how to use in practice
3.	Theory and calculation of livestock machinery	Subject teaches the students of masters' level that physical-mechanical properties of forages, types of stock-raising machines, construction of their main units and working principles, equipment and implements that are used in stock-raising and theoretical bases of determining technological parameters of performed technological work process, theoretical substantiation of work regimes of the machines and their working units, as well the demands of zoo technics that are required for developed machines.
4.	Agricultural machinery design	Discipline allows you to give knowledge and skills on the methodology and principles of design and construction of agricultural machinery. Knowledge of the stage of creation of machines, design procedures, on the economic substantiation of the chosen design of machines, on automatic design, design, ergonomics, environmental aspects, as well as knowledge on the interaction of design work with production processes.

5.	Statistical methods of experimental data	Teaches the importance of statistical processing of experimental results, statistical characteristics of experimental data and methods for their calculation, assessment of the materiality of the difference of experimental results, dispersive, regression and correlation analysis of the results and their practical application.
6.	Research Methods and Planning Experiments	Discipline allows the accumulation of knowledge of the basics of active scientific research using effective ways of scientific research, obtaining mathematical models objectively reflecting the technological process of a specific research object, based on the analysis of the definition of rational parameters quality of the technological process
7.	Research methodology	The subject "Research Methodology" provides future masters with knowledge and understanding of the concept of research, methodology of research and methods used in research, theoretical and experimental research, generalization of research results, specific aspects of their registration. develops skills in research methodology.
8.	Engineering research measuring instruments	The subject "Engineering Research Measuring Instruments" for masters in the specialty "Measuring tools and instruments used to determine the physical and mechanical properties of soil, plants and other processed materials, the quality of work, technical, operational and energy performance of agricultural machinery, interacting with the working parts of agricultural machinery equipment, provides knowledge and understanding of their use.