Abstract of the discipline of choice

Subjects	Program management of processes in the industry
Teacher	Nedashkivskyi Volodymyr Mykhailovych doctor of agricultural sciences, Professor of the Department of Feed Technology, feed additives and animal feed
Course and semester in which the discipline is planned to be studied	5 th year, 2 st semester
Faculties whose students are invited to study the discipline	Faculty of Biology and Technology
List of competencies and relevant learning outcomes provided by the discipline	**According to the requirements of the educational and professional program "Technology of production and processing of livestock products", applicants must acquire the ability to acquire the following competencies:** ZK 1. Ability to abstract thinking, analysis and synthesis. ZK3. Ability to learn and master modern knowledge. ZK 4. Skills in using information and communication technologies. ZK8. Ability to communicate in the national language both orally and in writing. FC 5. The ability to carry out organizational measures for the production of livestock products, solving practical tasks of professional activity, the basics of business communication, working with a team FC 10. Ability to characterize biological and technological processes using specialized software tools. The result of studying the discipline is the acquisition by students of the following knowledge and skills: - to combine information and communication technologies (to know the basic concepts of information technologies and information systems; to know the types of computer information technologies and the peculiarities of their use in agriculture); - implement different levels of animal nutrition and control the quality of fodder and fodder (be able to use software for data processing and analysis, calculation of feed rations for cattle, pigs, poultry, sheep); - to combine measures to increase the level of productivity of animals and the quality of their products (to know the specifics of the practical involvement of the information base in the technological solution of the main problems in animal husbandry to increase the level of productivity of animals).; - to design and model technological processes for the production and processing of animal husbandry products (to be able to use specialized systems for managing processes in animal husbandry (forecasting, planning, control, analysis of technological operations)

Description of the discipline

Prerequisites required for the study of the discipline	None
The maximum number of students who can study at the same time	25 students **Topics of lectures**

Topics of classroom classes	1. Theoretical foundations of software process management in industry. 2. The essence and types of information systems 3. Information resources of the industry 4. Mathematical models of control systems 5. System modeling and optimization agricultural enterprise, 6. Software for pig farming 7. Horse breeding software 8. Software for poultry farming 9. Software in beekeeping 10. Software in rabbit breeding 11. Application of information technologies in veterinary medicine 12. Programming of microprocessor control systems. 13. Information provision of economic and managerial decisions in the industry. 14. Technological equipment in the processing industry. 15. Information technologies in determining product quality. 16. Computer networks and their application technologies in agriculture. **Topics of practical classes** 1. Application of mobile applications to improve animal feeding. 2. Automated database Fodder database (planning of stock of fodder and fodder products) 3. Optimization of activities in large-scale breeding in animal husbandry. The use of statistical modeling to solve the problems of managing the selection process 4. Mathematical and instrumental methods of decision support 5. Programming of mobile applications for mobile devices 6. Analytical data processing systems OLAP 7. Use of mobile applications to improve animal feeding 8. Mathematical and instrumental methods of decision support 9. Automation of zootechnical accounting and assessment of egg productivity of laying hens and egg incubation 10. Decision support systems in agriculture "Agrotech", "Zootech", "Farmer"" 11. Solving the main problems of managing industry processes using linear programming. Mathematical methods of solving optimization problems using the MS EXCEL package 12. Photoanalysis system for automated assessment of beef and pork quality 13. Mastering the principles of Internet information and search systems. Electronic publications. Information resources Internet. Specialized search engines. Specialized thematic catalogs. Information portals 14. Management of advertising and information processes in the industry. Multimedia information processing tools. Creating a presentation using PowerPoint 15. Production planning. Calculation of network graphs using MS Project 16. Use of photo image processing technologies in production.
Language of instruction	Ukrainian