MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

STATE BIOTECHNOLOGICAL UNIVERSITY

EDUCATIONAL AND SCIENTIFIC PROGRAM
"VETERINARY MEDICINE"

LEVEL OF HIGHER EDUCATION – Third (educational and scientific)

DEGREE OF HIGHER EDUCATION – Doctor of Philosophy

SPECIALTY – H6 Veterinary medicine

FIELD OF STUDY – H Agriculture, forestry, fisheries and veterinary medicine

EDUCATIONAL QUALIFICATION – Doctor of Philosophy in Veterinary Medicine

APPROVED BY THE ACADEMIC COUNCIL
of State Biotechnological University
(protocole № from «24» of April 2025 y.)
it is put into action from 01 of September 2025 y.

Acting rector_____ /Andrii Kudriashov/

Kharkiv – 2025

LETTER OF APPROVAL OF THE UPDATE

of the educational and scientific program

“Veterinary Medicine”

of the third (educational and scientific) level of higher education in the specialty

211 Veterinary medicine

“APPROVED”

Vice-rector for scientific work Mikhailov V. M.

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“APPROVED”

Dean of the Faculty of Veterinary Medicine O.O. Tsymerman

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“APPROVED”

Guarant of the educational and scientific program Sliusarenko D.V.

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PREFACE

The Educational and Scientific Programme (ESP) for the preparation of Doctors of Philosophy in the field of Field of knowledge H Agriculture, forestry, fisheries and veterinary medicine, specialties H6 Veterinary medicine is developed in accordance with the Law of Ukraine "On Higher Education" of 01.07.2014 №1556-VII, Resolutions of the Cabinet of Ministers of Ukraine "On Approval of the National Qualifications Framework" of 23.11.2011 No. 1341, "On Approval of Licensing Conditions for Educational Activities of Educational Institutions" of 30.12.2015 № 1187, "On Approval of the Procedure for the Training of Higher Education Applicants for the Degree of Doctor of Philosophy and Doctor of Science in Higher Education Institutions (Scientific Institutions)" of 23.03.2016 № 261, as well as "Regulations on the Organisation of the Educational Process at the State Biotechnological University" (2021).

The ESP contains the profile of the educational and research programme, the amount of ECTS credits required to obtain the relevant higher education degree; a list of graduate competencies; the normative content of training of higher education students formulated in terms of learning outcomes; forms of certification of higher education students; requirements for the availability of an internal quality assurance system for higher education.

Developed by a project team consisting of:

Sliusarenko Dmytro Viktorovych - Doctor of Veterinary Sciences, Head of the Department of Veterinary Surgery and Reproductive Medicine of the State Biotechnological University, guarant of the educational and scientific programme of the speciality 211 Veterinary Medicine of the third level of higher education.

Kibkalo Dmytro Viktorovych - Doctor of Veterinary Sciences, Professor of the Department of Internal Diseases and Clinical Diagnostics of Animals of the State Biotechnological University.

Yatsenko Ivan Volodymyrovych - Doctor of Veterinary Sciences, Professor of the Department of Normal And Pathological Morphology, State Biotechnological University.

Kushch Mykola Mykolaiovych - Doctor of Veterinary Sciences, Professor of the Department of Normal and Pathological Morphology, State Biotechnological University.

Busol Lesia Volodymyrivna - Candidate of Veterinary Sciences, Associate Professor of the Department of Sanitation, Hygiene and Forensic Veterinary Medicine, State Biotechnology University.

Grinchenko Dmytro Mykolaiovych - Candidate of Veterinary Sciences, Associate Professor of the Department of Epizootology and Microbiology, State Biotechnological University.

Reviews and feedback from external stakeholders:

Zavgorodniy Andriy Ivanovych, Deputy Director for Research and Innovation of the National Research Center “Institute of Experimental and Clinical Veterinary Medicine”, Doctor of Veterinary Sciences, Professor, Corresponding Member of the National Academy of Agrarian Sciences of Ukraine.

Veselyi Viktor Anatoliiovych, Head of the Parasitology and Ichthyopathology Department of the Kharkiv Regional Laboratory of the State Service of Ukraine for Food Safety and Consumer Protection, PhD in Veterinary Sciences.

1. Profile of the educational and scientific program "Veterinary Medicine", specialty 211 Veterinary Medicine

General information	
Full name of the higher education institution and structural unit	State Biotechnological University, Faculty of Veterinary Medicine
Degree of higher education and title of qualification in the original language	Third (educational and scientific) level Doctor of Philosophy in Veterinary Medicine
Official name of the educational program	Educational and scientific program "Veterinary Medicine"
Type of diploma and scope of the educational program	- PhD Doctor of Philosophy, 50 ECTS credits, duration of study - 4 years
Availability of accreditation	Certificate of accreditation of the educational program, valid until 26.11.2025
Cycle / level	National Qualification Framework of Ukraine - level 8, FQEHEA (European Higher Education Area) - third cycle, EQF-LLL (European Qualification Framework for Lifelong Learning) - level 8.
Prerequisites	Master's degree or specialist's degree in education
Language(s) of instruction	Ukrainian
Validity of the educational program	4 years
Internet address of the permanent placement of the description of the educational program	http://btu.kharkov.ua/pro-universitet/osvitnya-diyalnist/osvitni-programi/
1. Aim of educational program	
Ensuring fundamental theoretical and practical training of highly qualified specialists capable of forming and implementing new ideas of a practical, research and innovation nature, solving complex problems of veterinary medicine in the diagnosis, treatment and prevention of animal diseases, conducting own scientific research at the modern level, the results of which have scientific novelty, theoretical and practical significance, and carrying out scientific and pedagogical activities.	
2. Characteristics of educational program	
Subject area (field of knowledge, specialty, specialization (if any))	Field of knowledge - H Agriculture, forestry, fisheries and veterinary medicine Specialty H6 Veterinary medicine
Orientation of the educational program	Educational and scientific. Applicants receive in-depth methodological, theoretical and research training by conducting research and scientific and pedagogical activities in the field of veterinary medicine. Conducting state-of-the-art research and gaining new knowledge in the

	field of veterinary medicine.
Main focus of the educational and professional program and specialization	Higher education at the third (educational and scientific) level of higher education Doctor of Philosophy (PhD) in the field of 21 "Veterinary" in the specialty 211 "Veterinary Medicine".
Features of the program	The educational and scientific program is aimed at the high-quality training of highly qualified specialists capable of conducting research at the modern international level in order to acquire new knowledge, practical skills, and develop professional, research and educational competencies necessary for implementation in science, education and production.
3. Graduates' suitability for employment and further training	
Suitability for employment	Graduates can be employed as research and teaching staff of the highest qualification in research, diagnostic, design institutions and divisions of veterinary medicine enterprises (of various forms of ownership), bioprocessing plants and biological products manufacturing enterprises, higher education institutions, and administrative bodies in the field of veterinary medicine (State Service of Ukraine for Food Safety and Consumer Protection). Positions according to the Classifier of Occupations of Ukraine. Assistant (2310.2), associate professor (2310.1), professor (2310.1), director (head) of a small industrial enterprise (firm) (1312), director (head) of an organization (research, development, design) (1210.1), director (head) of a vocational educational institution (vocational school, vocational school, etc.) (1210. 1), director (head, other manager) of an enterprise (1210.1), director (rector, head) of a higher education institution (technical school, college, institute, academy, university, etc.) (1210.1), director of advanced training courses (1210.1), director of a research institute (1210.1), director of a training center (1229. 4), head (head) of the department (research, design, project, etc.) (1237.2), head of the department in the college (1229.4), laboratory assistant (veterinary medicine) (3212), laboratory assistant (chemical and physical research) (3111), preparer (veterinary medicine) (9211), doctor of veterinary medicine (2223.2), doctor of veterinary medicine in hygiene and sanitation (2223. 2), Doctor of Veterinary Medicine in Laboratory Diagnostics (2223.2), Doctor of Veterinary Medicine in Pharmacy (2223.2), Junior Researcher (Veterinary Medicine) (2223.1), Researcher (Veterinary Medicine) (2223.1), Researcher-Consultant (Veterinary Medicine) (2223.1), Head of Laboratory (Research, Development, etc.) (1237.2). Place of employment. The Ministry of Agrarian Policy and Food of Ukraine, the State Service of Ukraine for Food Safety and Consumer Protection, veterinary medicine laboratories of various levels, higher education institutions of I-IV accreditation levels (colleges, technical schools,

	institutes, academies, universities) of veterinary and agricultural direction, colleges, research institutes (stations, laboratories), veterinary medicine institutions of various forms of ownership, state, farm and private agricultural enterprises, bioprocessing plants and enterprises engaged in the development, manufacture and sale of veterinary products.
Further training	Training to improve skills and improve managerial, administrative, scientific, research, pedagogical or other activities, obtaining grants, scholarships, etc. Obtaining a doctoral degree in Veterinary Medicine.
5. Teaching and learning	
Teaching and learning	Problem-oriented training, which is carried out in the form of lectures, seminars, practical classes, consultations, independent study of scientific manuals, periodicals, and the use of specialized information from the Internet. The approach to teaching and learning involves: - the introduction of active learning methods that ensure a personally-oriented approach and the development of thinking in postgraduate students (applicants); - close cooperation of postgraduate students (applicants) with their scientific supervisors; - support and consulting of postgraduate students (applicants) by scientific, pedagogical, and research workers of the State Biotechnological University and other higher education institutions of Ukraine and abroad, including providing access to modern equipment; - involvement of recognized practitioners in the field of management and administration in consulting postgraduate students (applicants); - information support regarding the participation of postgraduate students (applicants) in competitions for scientific scholarships, prizes, grants (including international ones); - providing the opportunity for postgraduate students (applicants) to participate in the preparation of scientific projects for competitions of the Ministry of Education and Science of Ukraine; - direct participation in the implementation of budgetary and initiative scientific research works.
Evaluation	The system of knowledge assessment in the disciplines of the educational and scientific program consists of current and final control. Current control of knowledge of higher education applicants for the degree of Doctor of Philosophy is carried out in oral and written forms (surveys, testing, solving situational problems). Final control of the success of the postgraduate student's (obtainer's) studies is carried out in the form of an exam, test, reports. Assessment of educational achievements is carried out according to the 100-point (rating) ECTS scale, the national 4-point scale ("excellent", "good", "satisfactory",

	"unsatisfactory") and verbal ("graded", "not graded") systems. The final result of the postgraduate student's (obtainer's) studies is a properly formatted dissertation based on the results of scientific research, its public defense and awarding him the scientific degree of Doctor of Philosophy in the specialty 211 Veterinary Medicine.
6. Program competencies	
Integral competence	The ability to generate new ideas, solve complex problems of professional and/or research and innovation activities in the field of veterinary medicine, apply the methodology of scientific and pedagogical activities, and conduct their own scientific research, the results of which have scientific novelty, theoretical and practical significance.
General competences (GC)	GC1. Ability to solve complex problems in the field of veterinary medicine on the basis of a systematic scientific and general cultural outlook in compliance with the principles of professional ethics and academic integrity. GC2. Ability to search, process and analyze information from various sources. GC3. Ability to abstract thinking, analysis and synthesis. GC4. Ability to work in an international context.
Special (professional) competencies (SC)	SC1. Ability to identify, formulate and solve research problems in the field of veterinary medicine, evaluate and ensure the quality of research in compliance with the requirements of professional ethics. SC2. Ability to perform original research, achieve scientific results that create new knowledge in veterinary medicine and related areas. SC3 Ability to initiate, develop and implement complex innovative projects in the field of veterinary medicine and related interdisciplinary projects. SC4. Ability to conduct scientific discussions at the national and international levels, to defend their scientific position in compliance with the norms of scientific ethics and academic integrity. SC5. Ability to determine the set of necessary modern clinical, instrumental and laboratory methods and techniques, as well as to understand the purpose and use the necessary professional equipment, tools, reagents, etc. necessary for research and establishing the state of health and welfare of animals of different species and classes, biological substrates, forensic veterinary examination, ensuring food safety and quality, etc. in accordance with the chosen scientific direction and the goal. SC6. Ability to continuous self-development and self-improvement. SC7. Ability to generate new ideas for the development of the theory and practice of veterinary medicine, to identify, pose and solve research problems, to evaluate and ensure the quality of research.

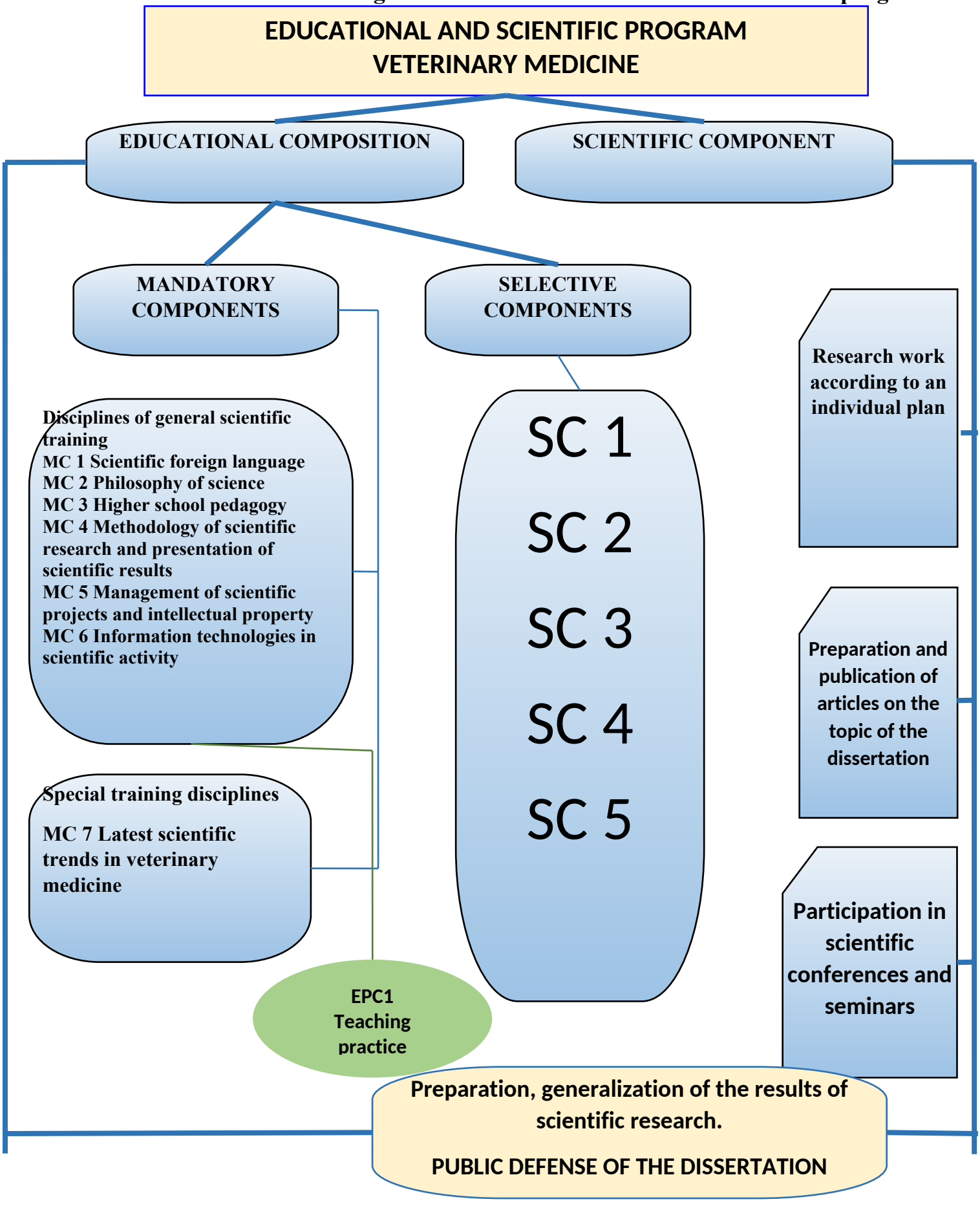
7. Program learning outcomes	
PLO1. To have advanced conceptual and methodological knowledge of veterinary medicine and related fields, as well as research skills sufficient to conduct scientific and applied research at the level of the latest world achievements in the relevant field and to obtain new knowledge and innovations. PLO2. Freely present and discuss with specialists and non-specialists the results of research, scientific and applied problems of veterinary medicine in the state and foreign languages, publish research results in scientific publications in leading professional domestic and international scientific journals. PLO3. Formulate and test scientific hypotheses; use available literature data and evidence, including the results of experimental studies, observations, theoretical analysis and computer modeling of systems and processes in the field of veterinary medicine to substantiate the conclusions of research results. PLO4. Develop and research conceptual, mathematical and computer models of processes and systems, effectively use them to gain new knowledge and/or create innovative products in veterinary medicine and related areas. PLO5. To plan and perform experimental and theoretical research in veterinary medicine and related areas using modern tools and in compliance with professional and academic ethics, to critically evaluate and analyze the results of their own research and the results of other researchers in the context of the whole range of modern knowledge about the problem under study. PLO6. To apply modern tools and technologies for searching, processing and analyzing information, in particular, statistical methods for analyzing large-scale and/or complex data, structures, specialized databases and information systems. PLO7. Develop and implement scientific and innovative projects that make it possible to rethink existing and create new holistic knowledge or professional practice and solve significant scientific and practical problems of veterinary medicine in compliance with the norms of bioethics, biosafety and professional ethics, taking into account social, economic and legal aspects. PLO8. Deeply understand the general principles, methods and methodology of scientific research, apply them in their own research in the field of veterinary medicine and in teaching practice. PLO9. Identify and apply a set of necessary modern clinical, instrumental and laboratory methods and techniques, professional equipment, tools, reagents, etc. necessary for conducting research on the health and welfare of animals of different species and classes; understand the logical sequence of actions during forensic veterinary examination and be able to draw up appropriate documentation; ensure the safety and quality of food and feed; ensure the control and circulation of by-products of animal origin and various biological products. PLO10. Apply the general principles and methods of natural sciences, as well as modern methods and tools, digital technologies and specialized software to conduct research in the field of veterinary medicine. PLO11. Organize and carry out the educational process in the field of veterinary medicine, its scientific, educational, methodological and regulatory support, develop and teach special disciplines in higher education institutions.	
8. Resource support for program implementation	
Personnel support	The academic staff meets the requirements of the current legislation of Ukraine. Academic and teaching staff involved in the implementation of the educational program are employees of the university, responsible for the courses have a scientific degree and academic title and a confirmed level of scientific and professional activity.

	In accordance with the Law of Ukraine "On Higher Education", advanced training and internships for academic staff are provided at least once every five years.
Material and technical support	Material and technical support of the educational process (classrooms, libraries, specialized rooms, computer labs, educational laboratories, multimedia equipment, etc.) meets the requirements for conducting lectures and practical classes, including in remote mode. The university has local computer networks with Internet access. The availability of specialized software and necessary open Internet access in specialized computer labs at the departments enables students to acquire the required competencies and skills. All necessary social and living infrastructure is available (dormitories, canteen, sports halls, outdoor sports grounds, gyms, medical facilities), and the number of places in dormitories meets the requirements.
Information and educational and methodological support	Information support is provided through open access to the Internet; the use of the official website (http://btu.kharkov.ua/); official pages of departments, the doctoral and postgraduate department on the official website and social media; information resources of the Scientific Library of BSTU (http://btu.kharkov.ua/nauka/naukova-biblioteka/), including the institutional repository with content from four repositories (Open Archive KhNTUA, irHDUHT, eKhNAUIR, repoHDZVA) and free access to the scientometric databases Scopus and Web of Science; educational process information packages (which include the Educational and Scientific Program, curriculum, academic schedule, working programs of academic disciplines, methodological materials for studying disciplines, completing pedagogical practice, etc.).
9. Academic Mobility	
National credit mobility	Based on bilateral agreements between the State Biotechnological University and higher education institutions and scientific institutions of Ukraine.
International credit mobility	Within the framework of international programs based on bilateral agreements between the State Biotechnological University and partner institutions of higher education and scientific institutions of other countries.
Training of foreign applicants for higher education	Possible, after studying the Ukrainian language course, with teaching of disciplines in English and Ukrainian

2. List of components of the educational and scientific program and their logical sequence

Course code	Components of the educational program (academic disciplines, course projects (papers), internships, qualification work)	Number of credits	Final control form
1	2	3	4
1. Mandatory components of the Education Program			
MC1	Scientific foreign language	8	test, exam
MC2	Philosophy of science	4	exam
MC3	Higher school pedagogy	3	exam
MC4	Methodology of scientific research and presentation of scientific results	3	exam
MC5	Scientific project management and intellectual property	3	exam
MC6	Information technologies in scientific activity	3	exam
MC7	Latest scientific trends in veterinary medicine	7	test, exam
Загальний обсяг обов`язкових дисциплін:		**31**	
2. Вибіркові компоненти ОП			
SC1	Selective component	3	credit
SC2	Selective component	3	credit
SC3	Selective component	3	credit
SC4	Selective component	3	credit
SC5	Selective component	3	credit
Total volume of selective components:		**15**	
EPC1	**Teaching practice**	4	report
Total volume of mandatory components:		**35**	
TOTAL SCOPE OF THE EDUCATIONAL PROGRAM		**50**	

2.1. Structural and logical scheme of the educational and scientific program



3. Form of certification of higher education applicants

The certification of graduates of the educational and scientific program "Veterinary Medicine" in is carried out on the basis of a public defense of scientific achievements in the form of a dissertation in the specialty and is completed by issuing a document of the established sample on awarding him the degree of Doctor of Philosophy with the assignment of the qualification: Doctor of Philosophy in the specialty "Veterinary Medicine". The certification is carried out openly and publicly.

Forms of certification of higher education applicants	Certification of candidates for the degree of Doctor of Philosophy is carried out in the form of a public defense of the dissertation.
Dissertation requirements for the degree of Doctor of Philosophy)	A dissertation for the degree of Doctor of Philosophy is an independent, comprehensive study that proposes a solution to a complex problem in the field of veterinary medicine, or at its interface with other specialties, the results of which constitute an original contribution to theory and practice and are published in scientific publications in peer-reviewed scientific journals. The dissertation must not contain academic plagiarism, falsification, or fabrication. The dissertation must be posted on the website of the higher education institution (scientific institution).

4. Requirements for the system of internal quality assurance of higher education

The State Biotechnological University operates a system for ensuring the quality of educational activities and the quality of higher education (internal quality assurance system), which provides for the implementation of the following procedures and measures:

1. Determination of principles and procedures for ensuring the quality of higher education;
2. Monitoring and periodic review of educational programs;
3. Annual assessment of higher education applicants, and regular publication of assessment results on the official website of the university;
4. Ensuring advanced training of scientific and pedagogical, pedagogical and scientific workers;
5. Ensuring the availability of necessary resources for organizing the educational process, including independent work of applicants, for each educational program;
6. Ensuring the availability of information systems for effective management of the educational process;
7. Ensuring the publicity of information about educational programs, degrees of higher education and qualifications;
8. Ensuring an effective system for preventing and detecting academic plagiarism in scientific works of employees of higher educational institutions and higher education applicants;

The system for ensuring the quality of educational activities and the quality of higher education by a higher education institution (internal quality assurance system) is assessed by the National Agency for Quality Assurance in Higher Education or by independent institutions for assessing and ensuring the quality of higher education accredited by it for its compliance with the requirements for the system for ensuring the quality of higher education, approved by the National Agency for Quality Assurance in Higher Education, and international standards and recommendations for ensuring the quality of higher education.

1. Matrix of correspondence of program competencies to educational program components

Компе-тентності	Components educational program						
	MC 1	MC 2	MC 3	MC 4	MC 5	MC 6	MC 7
GC 01							+
GC 02		+	+	+	+	+	
GC 03	+	+		+		+	+
GC 04	+		+	+	+	+	+
SC 01			+	+			+
SC 02					+	+	+
SC 03				+	+		
SC 04				+	+	+	+
SC 05							+
SC 06	+	+	+				
SC 07				+	+	+	+

1. Matrix of ensuring program learning outcomes (PLN) by the corresponding components of the educational program

Програмні результати навчання	Components educational program						
	MC 1	MC 2	MC 3	MC 4	MC 5	MC 6	MC 7
PLO 01					+	+	+
PLO 02	+	+		+			
PLO 03				+		+	+
PLO 04		+			+		+
PLO 05		+		+	+	+	+
PLO 06				+		+	
PLO 07					+		+
PLO 08				+			
PLO 09							+
PLO 10						+	
PLO 11			+				