



**MINISTRY OF EDUCATION AND SCIENCE OF
UKRAINE**

STATE BIOTECHNOLOGICAL UNIVERSITY

**EDUCATIONAL AND VOCATIONAL PROGRAM
"MANAGEMENT"**

HIGHER EDUCATION LEVEL: first (bachelor's)

HIGHER EDUCATION DEGREE: Bachelor's

SPECIALTY: D 3 "Management"

FIELD OF KNOWLEDGE: D "Business, Administration and Law"

EDUCATIONAL QUALIFICATION: Bachelor of Management

**APPROVED BY THE ACADEMIC
COUNCIL**

**State Biotechnological University
protocol no. _from " _» April 2025
September 1, 2025.**

Acting Rector

_____ / **Andriy Kudryashov** /

**Kharkiv – 2025
PREFACE**

Developed by a project team consisting of:

Developers:

1. Voronkova A.A. - Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Business and Administration
2. Petrov V.M. - Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Business and Administration;
3. Sagachko Yu.M. - Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Business and Administration;
4. Gridin O.V. - Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Business and Administration;
5. Tkacheva S.S. - Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Business and Administration

Entered into force on September 1, 2025.

Reviews and feedback from external stakeholders:

Reviews and feedback from external stakeholders are added

1. MANAGEMENT EDUCATIONAL PROGRAM PROFILE

1 – General information	
Full name of the higher education institution and structural unit	State Biotechnological University Faculty of Management, Administration and Law Department of Management, Business and Administration
Higher education degree and title of qualification in the original language	Bachelor Bachelor of Management
Official name of the educational program	Educational and professional program "Management" for training specialists of the first (bachelor's) level of higher education in the specialty D 3 "Management"
Type of diploma and scope of educational program	Bachelor's degree, single, - based on complete general secondary education, is 240 ECTS credits, - on the basis of the "junior bachelor" degree (educational and qualification level "junior specialist"), a higher education institution has the right to recognize and re-enroll ECTS credits obtained within the framework of the previous educational program for the preparation of a junior bachelor (junior specialist), in the amount of no more than 120 ECTS credits. At least 50% of the educational program must be aimed at providing general and special (professional) competencies in the specialty defined by this higher education standard.
Availability of accreditation	Ministry of Education and Science of Ukraine; Certificate of Accreditation of the Educational Service No. 21015703. Validity period – July 1, 2025.
Cycle/level	First (bachelor) level of higher education; NQF of Ukraine – level 6, FQ-EHEA – first cycle, EQF-LLL – level 6
Prerequisites	Completed secondary education or a junior bachelor's degree or junior specialist's degree
Language(s) of instruction	Ukrainian language
Duration of the educational program	Valid until 01.07.2025
Internet address of permanent posting of the educational program description	http://btu.kharkov.ua/pro-university/osvitnya-diyalnist/osvitni-programi/
2 – Purpose of the educational program	
Training of highly qualified and creative specialists capable of solving practical problems and complex specialized tasks characterized by complexity and uncertainty of conditions in the field of management of organizations and their divisions of various organizational and legal forms, industry areas of activity, sizes and scales.	
3 – Characteristics of the educational program	
Subject area (field of knowledge, specialty, specialization (if	Objects of study and/or activity: management of organizations and their divisions. Learning objectives: training of specialists capable of solving practical problems

available))	<p>and complex specialized tasks in the field of management of organizations and their divisions on the basis of mastering a system of competencies .</p> <p>Theoretical content of the subject area : paradigms, laws, patterns, principles, historical prerequisites for the development of management; concepts of systemic, situational, adaptive, anticipatory, anti-crisis, innovative, project management, etc.; functions, methods, technologies and management decisions in management.</p> <p>Methods, techniques, technologies and tools : general scientific and specific research methods (computational and analytical, economic and statistical, economic and mathematical, expert evaluation, factual, sociological, documentary, balance sheet, etc.); methods of implementing management functions (marketing research methods; economic diagnostics methods; forecasting and planning methods; methods of designing organizational management structures; motivation methods; control methods; methods of assessing social, organizational and economic efficiency in management, etc.); management methods (administrative, economic, socio-psychological, technological); tools for substantiating management decisions (economic analysis, simulation modeling, decision tree, etc.); information technologies in management.</p> <p>Tools and equipment: information and analytical tools, management decision support systems, special software.</p> <p>Specialty D 3 "Management" Field of knowledge D "Management and administration"</p>
Orientation of the educational program	Educational and professional
Main focus of the educational program and specialization	General program. Training of management specialists who are able to use the acquired competencies in practical activities.
Program features	The program is aimed at training proactive, creative, responsible, sociable specialists capable of rapid adaptation, forward-thinking, developing new methods and ways of solving problems and tasks, ready in terms of qualification to work independently in the management apparatus of enterprises, organizations and their divisions of various organizational and legal forms, industry areas of activity, sizes and scales.
4 – Graduates’ employability and further education	
Eligibility for employment	A Bachelor of Management is prepared to work at enterprises, institutions and organizations of all industries and is able to hold positions of specialists in the fields of operational management, sales and marketing, business process and personnel management, in particular: administrative work manager, marketing manager, personnel manager, supply manager, advertising manager, sales manager, public relations manager, foreign economic activity manager, strategic management specialist, entrepreneurship efficiency specialist, commodity market research analyst, economic issues specialist, financial and economic security analyst (asset management, production rationalization, market research, investment, lending, pricing, etc.).
Further training	Possibility of studying according to the programs: NQF level 7, second cycle FQ-EHEA and EQF-LLL level 7
5 – Teaching and assessment	
Teaching and learning	Student-centered learning, self-study, problem-oriented learning; conducting lectures, practical and laboratory and seminar classes, trainings; organizing master classes, round tables, scientific conferences and seminars; involving students in project work, competitions, Olympiads and research activities. Innovative e-learning technologies are used. Problem-based, interactive, project-based, information and computer-based, self-developing, collective and integrative, contextual learning technologies.

Evaluation	<p>Oral and written survey, test control of knowledge, presentation of scientific work, defense of written works, defense of qualification work, tests, exams.</p> <p>Assessment of students' academic achievements is carried out on a four-point scale - 4-point national scale (excellent, good, satisfactory, unsatisfactory); 2-level national scale (included/not included) (passed); 100-point; ECTS scale (A, B, C, D, E, F, FX).</p>
6 – Software competencies	
Integral competence	<p>The ability to solve complex specialized tasks and practical problems, characterized by complexity and uncertainty of conditions, in the field of management or in the process of learning, which involves the application of theories and methods of social and behavioral sciences</p>
General Competencies (GC)	<p>GC 1. The ability to exercise one's rights and obligations as a member of society, to realize the values of civil (democratic) society and the need for its sustainable development, the rule of law, and the rights and freedoms of man and citizen in Ukraine.</p> <p>GC 2. The ability to preserve and multiply moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.</p> <p>GC 3. Ability for abstract thinking, analysis, synthesis.</p> <p>GC 4. Ability to apply knowledge in practical situations</p> <p>GC 5. Knowledge and understanding of the subject area and understanding of professional activity.</p> <p>GC 6. Ability to communicate in the state language both orally and in writing.</p> <p>GC 7. Ability to communicate in a foreign language.</p> <p>GC 8. Skills in using information and communication technologies.</p> <p>GC 9. Ability to learn and master modern knowledge.</p> <p>GC 10. Ability to conduct research at the appropriate level.</p> <p>GC 11. Ability to adapt and act in a new situation.</p> <p>GC 12. Ability to generate new ideas (creativity).</p> <p>GC 13. Appreciation and respect for diversity and multiculturalism.</p> <p>GC 14. Ability to work in an international context.</p> <p>GC 15. The ability to act based on ethical considerations (motives).</p> <p>GC 16 Ability to make decisions and act in accordance with the principle of non-acceptance of corruption and any other manifestations of dishonesty.</p> <p>GC 17 Knowledge, skills and abilities necessary to fulfill the constitutional duty to protect the Fatherland, independence and territorial integrity of Ukraine.</p>

<p>Professional competencies of the specialty (PC)</p>	<p>FC 1. Ability to identify and describe the characteristics of an organization. FC 2. The ability to analyze the results of an organization's activities, compare them with factors influencing the external and internal environment. FC 3. Ability to determine the prospects for the development of the organization. FC 4. Ability to identify functional areas of the organization and the relationships between them. FC 5. The ability to manage the organization and its units through the implementation of management functions, FC 6. The ability to act socially responsibly and consciously. FC 7. Ability to select and use modern management tools. FC 8. Ability to plan organizational activities and manage time. FC 9. Ability to work in a team and establish interpersonal interaction when solving professional tasks. FC 10. Ability to evaluate work performed, ensure its quality, and motivate the organization's personnel. FC 11. Ability to create and organize effective communications in the management process. FC 12. Ability to analyze and structure organizational problems, and formulate sound decisions. FC 13. Understand the principles and norms of law and use them in professional activities. FC 14. Understand the principles of psychology and use them in professional activities. FC 15. Ability to develop and demonstrate leadership qualities and behavioral skills.</p>
<p>7 – Program learning outcomes</p>	
	<p>PRN 1 Know your rights and responsibilities as a member of society, be aware of the values of civil society, the rule of law, the rights and freedoms of man and citizen in Ukraine. PRN 2 Preserve moral, cultural, and scientific values and increase the achievements of society, use various types and forms of physical activity to lead a healthy lifestyle. PRN 3 Demonstrate knowledge of management theories, methods and functions, and modern leadership concepts. PRN 4 Demonstrate skills in identifying problems and justifying management decisions PRN 5 Describe the content of the functional areas of the organization. PRN 6 Demonstrate skills in searching, collecting and analyzing information, calculating indicators to justify management decisions. PRN 7 Demonstrate organizational design skills. PRN 8 Apply management methods to ensure the effectiveness of the organization's activities. PRN 9 Demonstrate interaction, leadership, and teamwork skills. PRN 10 Have the skills to justify effective tools for motivating the organization's personnel. PRN 11 Demonstrate skills in situation analysis and communication in various areas of the organization's activities. PRN 12 Assess the legal, social and economic consequences of the organization's operations. PRN 13 Communicate orally and in writing in the state and foreign languages.</p>

	<p>PRN 14 Identify the causes of stress, adapt yourself and team members to a stressful situation, and find ways to neutralize it.</p> <p>PRN 15 Demonstrate the ability to act socially responsible and socially conscious based on ethical considerations (motives), respect for diversity and interculturality.</p> <p>PRN 16 Demonstrate skills of independent work, flexible thinking, openness to new knowledge, and being critical and self-critical.</p> <p>PRN 17 Conduct research individually and/or in a group under the guidance of a leader.</p>
8 – Resource provision for program implementation	
Human resources	<p>Program developers: 4 candidates of sciences, associate professors.</p> <p>Guarantor of the educational and professional program: Candidate of Economic Sciences, Associate Professor A.A. Voronkova – Associate Professor of the Department of Management, Business and Administration. Scientific and pedagogical workers with scientific degrees and/or academic titles, as well as highly qualified specialists, are involved in the implementation of the program. In order to improve their professional level, all scientific and pedagogical workers undergo internships once every five years, including abroad.</p>
Logistics and technical support	<ul style="list-style-type: none"> - educational buildings; - dormitories; - thematic rooms; – course and qualification design office; - computer classes; - food outlets; - wireless Internet access points; - multimedia equipment; - sports hall, sports grounds
Information and educational and methodological support	<ul style="list-style-type: none"> – official website of DBTU: http://btu.kharkov.ua – official website of the Faculty of Law: http://btu.kharkov.ua/fakulteti-instituti/fakultet-menedzhmentu-administruvannya-ta-prava/ ; – unlimited access to the Internet; – DBTU scientific library, reading rooms; – Moodle virtual learning environment; – training and work plans; – educational process schedules – educational and methodological complexes of disciplines; – didactic materials for independent and individual work of students in disciplines; – internship programs; – methodological instructions for completing coursework and qualification work; – criteria for assessing the level of training.
9 – Academic mobility	
National credit mobility	On general grounds within Ukraine
International credit mobility	According to current legislation and concluded agreements
Education of foreign higher education applicants	According to the current legislation on the training of foreign citizens

2. LIST OF CURRICULUM COMPONENTS AND THEIR LOGICAL SEQUENCE

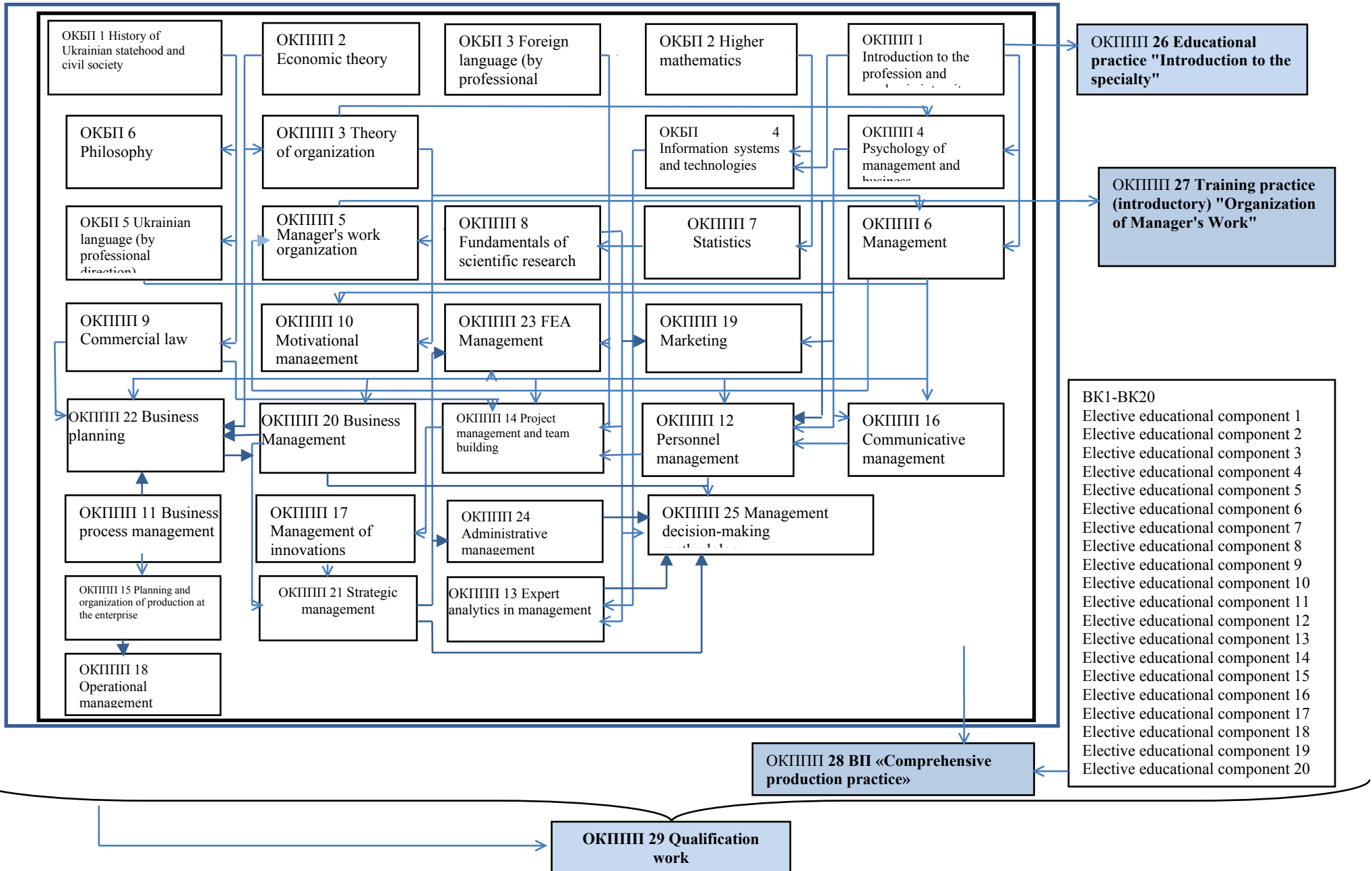
2.1. List of components of the OP

Code n/a	Components of the educational program (courses, course projects (papers), internships, qualification work)	Number of credits	Form control summary
1	2	3	4
1. Mandatory components of the OP			
<i>General training cycle</i>			
OKBP 1	History of Ukrainian statehood and civil society	4.0	Exam
OKBP 2	Higher mathematics	3.0	Exam
OKBP 3	Foreign language (by professional direction)	10.0	Test
OKBP 4	Information systems and technologies	3.0	Test
OKBP 5	Ukrainian language (for professional purposes)	4.0	Exam
OKBP 6	Philosophy	4.0	Exam
	Physical education (elective)		
<i>Professional training cycle</i>			
OKPPP 1	Introduction to the profession and academic integrity	3.0	Test
OKPPP 2	Economic theory	4.0	Exam
OKPPP 3	Organization theory	4.0	Exam
OKPPP 4	Psychology of management and business	4.0	Exam
OKPPP 5	Organization of the manager's work	8.0	Test, exam
OKPPP 6	Management	9.0	Exam
OKPPP 7	Statistics	4.0	Exam
OKPPP 8	Fundamentals of scientific research	3.0	Test
OKPPP 9	Commercial law	3.0	Test
OKPPP 10	Motivational management	4.0	Exam
OKPPP 11	Business process management	4.0	Test
OKPPP 12	Personnel management	8.0	Exam
OKPPP 13	Expert analytics in organizational management	8.0	Exam
OKPPP 14	Project management and team building	9.0	Test, exam, coursework
OKPPP 15	Planning and organization of production at the enterprise	8.0	Test
OKPPP 16	Communication management	4.0	Exam
OKPPP 17	Innovation Management	4.0	Exam
OKPPP 18	Operational management	4.0	Exam
OKPPP 19	Marketing	4.0	Test
OKPPP 20	Business Management	4.0	Test
OKPPP 21	Strategic management	6.0	Exam, coursework
OKPPP 22	Business planning	5.0	Exam
OKPPP 23	Foreign Economic Activity Management	4.0	Test
OKPPP 24	Administrative management	4.0	Exam
OKPPP 25	Methods of making managerial decisions	4.0	Test
Practice			
OKPPP 26	Training practice "Introduction to the profession"	6.0	Test
OKPPP 27	Training practice (introductory) "Organization of Manager's Work"	6.0	Test
OKPPP 28	Production practice "Integrated production practice"	4.0	Test
OKPPP 29	Completion and defense of qualification work	10.0	

Total volume of mandatory components (75%)		180.0	
2. Elective educational components*			
VK1-VK20	Elective courses		Test
Total volume of components at the student's choice (25%)		60.0	
TOTAL SCOPE OF THE EDUCATIONAL AND VOCATIONAL PROGRAM		240.0	

*In order to ensure the realization of the applicant's right to choose elective disciplines and form his own educational trajectory in accordance with Section X, Article 62 of the Law of Ukraine "On Higher Education" No. 1556-VII dated July 1, 2014, the Regulations "On the procedure for choosing elective academic disciplines by applicants at the State Biotechnological University" were approved <https://biotechuniv.edu.ua/wp-content/uploads/2023/06/pol-pro-obr-vyb-dysc-z.pdf>

2.2. Structural and logical scheme of the educational and professional program



1. FORM OF CERTIFICATION OF HIGHER EDUCATION GRADUATES

Forms of certification of higher education applicants	Certification is carried out in the form of a public defense of the qualification work.
Requirements for qualifying work	Qualification work should involve solving a complex specialized task or practical problem in the field of management, characterized by complexity and uncertainty of conditions, using theories and methods of economic science. There can be no academic plagiarism, falsification, or copying in the qualification work. The qualification work must be published on the official website of the higher education institution or its subdivision.

2. REQUIREMENTS FOR THE EXISTENCE OF AN INTERNAL QUALITY ASSURANCE SYSTEM IN 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) defining principles and procedures for ensuring the quality of higher education;
- 2) monitoring and periodic review of educational programs;
- 3) annual evaluation of higher education applicants, scientific and pedagogical and teaching staff and regular publication of the results of such evaluations on the official website of the University, on information stands and in any other way;
- 4) ensuring advanced training of pedagogical, scientific and scientific-pedagogical employees;
- 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, higher education degrees and qualifications;
- 8) ensuring compliance with academic integrity by University employees and higher education students, including the creation and operation of an effective system for preventing and detecting academic plagiarism;
- 9) publication of criteria, rules and procedures for evaluating the management performance of managers.

The system of 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 assessment and quality assurance of higher education accredited by it for its compliance with the requirements for the system of quality assurance of higher education approved by the National Agency for Quality Assurance in Higher Education, and international standards and recommendations for quality assurance of higher education.

3. LIST OF REGULATORY DOCUMENTS ON WHICH THE HIGHER EDUCATION STANDARD IS BASED

A. Official documents:

1. Law "On Higher Education" [Electronic resource]. URL : <http://zakon4.rada.gov.ua/laws/show/1556-18>.
2. Law "On Education" [Electronic resource]. URL : <http://zakon5.rada.gov.ua/laws/show/2145-19>.
3. National Classifier of Ukraine: "Classifier of Professions" DK 003:2010 (edition of 11/30/2017). Database "Legislation of Ukraine" / Verkhovna Rada of Ukraine. URL : <https://zakon.rada.gov.ua/rada/show/va327609-10#Text>.
4. National Qualifications Framework [Electronic resource]. URL : <http://zakon4.rada.gov.ua/laws/show/1341-2011-п>.
5. Resolution of the Cabinet of Ministers of Ukraine "On approval of the list of branches of knowledge and specialties in which higher education applicants are trained" / Database "Legislation of Ukraine" / Verkhovna Rada of Ukraine. URL : <https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF#Text>
6. Methodological recommendations for the development of higher education standards. URL : <https://mon.gov.ua/storage/app/media/vishcha-osvita/rekomendatsii-1648.pdf>.

B. Useful links:

1. Standards and recommendations for quality assurance in the European Higher Education Area . URL : https://ihed.org.ua/wp-content/uploads/2018/10/04_2016_ESG_2015.pdf
2. ISCED 2011 - <http://www.uis.unesco.org/education/documents/isced-2011-en.pdf>.
3. ISCED-F (MCKO-Г) 2013 - <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>.

**6. SOFTWARE COMPETENCY CORRESPONDENCE MATRIX
CURRICULUM COMPONENTS**

OP components	Competencies																																			
	IR	ZK 1	ZK 2	ZK 3	ZK 4	ZK 5	ZK 6	ZK 7	ZK 8	ZK 9	ZK 10	ZK 11	ZK 12	ZK 13	ZK 14	ZK 15	ZK 16	ZK 17*	FC 1	FC 2	FC 3	FC 4	FC 5	FC 6	FC 7	FC 8	FC 9	FC 10	FC 11	FC 12	FC 13	FC 14	FC 15			
OKBP 1		+	+	+							+			+		+	+							+												
OKBP 2				+	+						+														+											
OKBP 3								+				+			+															+						
OKBP 4	+			+	+				+	+	+														+											
OKBP 5			+				+			+																				+						
OKBP 6	+	+	+	+										+		+								+												
OKPPP 1		+	+			+				+						+	+		+			+		+												
OKPPP 2				+	+	+																	+	+						+						
OKPPP 3				+		+						+							+	+	+	+									+					
OKPPP 4					+	+				+		+		+		+							+					+		+		+		+	+	
OKPPP 5					+	+			+			+				+							+	+	+	+	+	+		+						
OKPPP 6	+			+	+	+						+				+			+	+	+	+	+		+											
OKPPP 7				+	+					+	+								+					+						+						
OKPPP 8	+			+	+	+			+	+	+		+						+	+	+				+										+	
OKPPP 9		+			+	+				+		+										+			+		+						+			
OKPPP 10	+					+						+		+		+							+	+				+	+	+				+	+	
OKPPP 11	+			+	+				+			+	+							+	+	+			+	+					+					
OKPPP 12	+	+				+								+		+				+			+	+	+			+	+	+			+	+		
OKPPP 13	+			+	+						+									+											+					
OKPPP 14	+			+	+	+			+			+	+							+	+						+	+					+	+		

OP components	Competencies																																		
	IR	ZK 1	ZK 2	ZK 3	ZK 4	ZK 5	ZK 6	ZK 7	ZK 8	ZK 9	ZK 10	ZK 11	ZK 12	ZK 13	ZK 14	ZK 15	ZK 16	ZK 17*	FC 1	FC 2	FC 3	FC 4	FC 5	FC 6	FC 7	FC 8	FC 9	FC 10	FC 11	FC 12	FC 13	FC 14	FC 15		
OKPPP 15	+			+	+	+					+	+	+						+	+	+	+				+	+				+				
OKPPP 16					+	+	+		+					+		+							+			+		+			+	+			
OKPPP 17	+			+	+					+		+	+									+				+	+								
OKPPP 18	+			+	+	+				+	+	+										+	+			+		+		+					
OKPPP 19				+	+							+	+							+	+					+					+				
OKPPP 20																																			
OKPPP 21	+			+	+	+						+	+									+	+				+				+				
OKPPP 22	+			+	+	+					+	+									+	+				+		+			+				
OKPPP 23	+				+	+		+	+			+			+				+	+				+	+	+	+			+					+
OKPPP 24					+	+																	+		+		+	+	+	+	+		+	+	
OKPPP 25	+			+	+	+				+						+	+					+			+						+				
OKPPP 26	+	+	+			+				+						+				+			+		+										
OKPPP 27	+				+	+						+				+								+	+	+	+	+		+					
OKPPP 28	+			+	+	+				+	+	+								+	+	+	+	+		+		+	+	+	+	+	+		
OKPPP 29	+			+	+	+	+			+		+								+	+	+	+			+	+				+	+			

***The curriculum is formed by the elective discipline "Theoretical Training of the Basic Vocational Training"**

**7. MATRIX OF PROVISION OF PROGRAM LEARNING OUTCOMES (PLN)
BY APPROPRIATE COMPONENTS OF THE EDUCATIONAL PROGRAM**

OP components	Program learning outcomes																
	PRN 1	PRN 2	PRN 3	PRN 4	PRN 5	PRN 6	PRN 7	PRN 8	PRN 9	PRN 10	PRN 11	PRN 12	PRN 13	PRN 14	PRN 15	PRN 16	PRN 17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
OKBP 1	+	+									+				+	+	
OKBP 2				+		+										+	+
OKBP 3											+		+			+	
OKBP 4				+		+					+					+	+
OKBP 5	+			+							+	+	+		+		
OKBP 6	+	+													+	+	
OKPPP 1	+				+	+			+						+	+	+
OKPPP 2			+			+						+				+	+
OKPPP 3			+		+		+					+					
OKPPP 4	+	+	+						+	+		+		+	+	+	
OKPPP 5		+					+	+	+	+	+		+	+	+	+	
OKPPP 6			+		+			+	+	+	+						
OKPPP 7				+		+	+									+	+
OKPPP 8			+	+		+	+				+					+	+
OKPPP 9	+			+	+						+	+					
OKPPP 10	+		+						+	+	+		+	+	+		
OKPPP 11				+		+	+	+				+				+	+
OKPPP 12	+		+	+					+	+				+	+		
OKPPP 13				+		+						+				+	+
OKPPP 14				+		+	+	+	+	+				+	+	+	+
OKPPP 15				+		+	+				+	+				+	+

OP components	Program learning outcomes																
	PRN 1	PRN 2	PRN 3	PRN 4	PRN 5	PRN 6	PRN 7	PRN 8	PRN 9	P RN 10	PRN 11	PRN 12	PRN 13	PRN 14	PRN 15	PRN 16	PRN 17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
OKPPP 16			+	+			+	+		+				+	+		
OKPPP 17				+	+	+		+				+				+	+
OKPPP 18			+	+	+	+			+							+	
OKPPP 19				+	+	+			+		+	+				+	+
OKPPP 20																	
OKPPP 21				+	+	+	+	+								+	+
OKPPP 22			+	+		+	+	+			+	+				+	+
OKPPP 23				+	+	+	+	+				+				+	
OKPPP 24			+	+				+	+	+	+	+			+		
OKPPP 25				+	+	+		+			+					+	
OKPPP 26	+				+	+			+						+	+	+
OKPPP 27		+					+	+	+	+	+		+	+	+	+	
OKPPP 28			+	+	+	+		+	+	+	+	+				+	+
OKPPP 29			+	+	+	+	+	+		+	+	+				+	+