MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

STATE BIOTECHNOLOGICAL UNIVERSITY

EDUCATIONAL AND PROFESSIONAL PROGRAMME «LAND MANAGEMENT AND CADASTRE»

HIGHER EDUCATION LEVEL – Second

HIGHER EDUCATION DEGREE – Master's degree

SPECIALITY – G18 Geodesy and land management

FIELD OF KNOWLEDGE – G Engineering, manufacturing and construction

EDUCATIONAL QUALIFICATIONS – Master's degree in geodesy and land management

APPROVED BY THE ACADEMIC COUNCIL
of the State Biotechnological University
(protocol No. 9 dated 24 April 2025 p.)
and shall come into force on 1 September 2025.

Acting rector

_____/ Andriy Kudryashov /

Kharkiv – 2025

FOREWORD

Improved by the project (working) group consisting of:

1. **Iryna Koshkalda**, Doctor of Economic Sciences, Professor, Head of the Department of Land Management, Geodesy and Cadastre;
2. **Olena Dombrovska**, PhD in Economics, Associate Professor of the Department of Land Management, Geodesy and Cadastre;
3. **Serhii Vynohradenko**, PhD in Economics, Associate Professor of the Department of Land Management, Geodesy and Cadastre;
4. **Tetiana Anopriienko**, PhD in Economics, Associate Professor of the Department of Land Management, Geodesy and Cadastre;
5. **Artur Bondarenko**, stakeholder, private entrepreneur, certified land surveyor;
6. **Anna Fedorova**, graduate of the second (master's) level of higher education in the Educational Program *"Land Management and Cadastre"* at Kharkiv National Agrarian University named after V. V. Dokuchaiev and the Educational Program *"Geoinformation Technologies"* at Kharkiv National University of Urban Economy named after O. M. Beketov, Chief Specialist of the Department of Spatial Planning of Territories, Architecture, and Urban Cadastre of the Department of Urban Development and Architecture of the Kharkiv Regional State Administration;
7. **Oleksandr Makarchuk**, first-year full-time master's student in the Educational Program *"Land Management and Cadastre"*, specialty 193 *Geodesy and Land Management*.

External stakeholder reviews:

- **Levkovska L. V.** – Doctor of Economic Sciences, Professor, Head of the Department of Natural Resources and Environmental Safety, Institute for Demography and Life Quality Problems of the National Academy of Sciences of Ukraine, Kyiv.
- **Pryimak S. M.** – Private entrepreneur, certified land surveyor and appraiser, Dnipro.
- **Maiboroda O. O.** – Private entrepreneur, certified land surveyor and appraiser, Kharkiv.

External stakeholder reviews are attached.

1. Profile of the Educational Program "Land Management and Cadastre" within the Specialty G18 "Geodesy and Land Management"

1– Загальна інформація	
Full name of the higher education institution and structural unit	State Biotechnological University Faculty of Forestry, Wood Processing Technologies, and Land Management
Level of higher education and title of qualification in the original language	Master's degree. Master of Science in Geodesy and Land Management
Official name of the educational programme	Educational and Professional Program "Land Management and Cadastre" of the second (master's) level of higher education in the field of knowledge G «Engineering, manufacturing and construction» specialty G18 « Geodesy and Land Management»
Type of diploma and scope of the educational programme	Master's Degree Diploma, single cycle; 90 ECTS credits; 1 year 4 months
Accreditation status	Accreditation Commission of the Ministry of Education and Science of Ukraine. Certificate – UD No. 21005729. Accredited until July 1, 2025.
Cycle/level	Second (master's) level of higher education; NQF of Ukraine – level 7, FQ-EHEA – second cycle, EQF-LLL – level 7
Prerequisites	An individual is entitled to pursue a master's degree provided they hold a bachelor's degree (or an educational qualification level of specialist).
Language(s) of instruction	Ukrainian language, English language
Duration of the educational programme	Until the end of the training period or the next programme update
Internet address of the permanent location of the description of the educational programme	https://biotechuniv.edu.ua/pro-universitet/osvitnya-diyalnist/osvitni-programi/
2 – The aim of the educational programme	

Training of qualified specialists (masters) in geodesy and land management, providing them with theoretical knowledge and competencies, as well as mastering the fundamentals of the methodology of professional and scientific activity, sufficient for the effective performance of tasks at the appropriate level of professional expertise.	
3 – Characteristics of the educational programme	
Subject area (field of knowledge, specialisation, specialisation (if applicable)	Field of Knowledge – *G «Engineering, manufacturing and construction»* Specialty – G18 *Geodesy and Land Management* *Objects of study:* theoretical foundations, methods, and technologies in land management, the state land cadastre, and land resources management. *Methods, tools, and technologies:* methods, approaches, and technologies for the collection, processing, and analysis of geospatial data within the state land cadastre. *Instruments and equipment:* scientific research methods, materials and equipment for the development of various types of land management and cadastral documentation, as well as computer software packages.
Orientation of the educational programme	Educational and professional programme, applied.
Main focus of the educational programme and specialisation	Special education and professional training in the field of geodesy and land management. Training of specialists capable of implementing modern principles and approaches in conducting topographic and geodetic surveys, as well as land management and cadastre activities. Keywords: geodesy, land management, state land cadastre, land resources management.
Programme features	A distinctive feature of the program is its focus on training specialists for organizing work in geodesy, land management, and the state land cadastre within the context of ongoing land and administrative reforms. In accordance with this, pre-certification practical training is provided in the structural divisions of the State Service of Ukraine for Geodesy, Cartography and Cadastre (Derzhheokadastr), as well as in enterprises and organizations engaged in the development of land management and cadastral documentation.
4 – Employability of graduates	

Employability	The specialist is prepared to work in accordance with the National Classifier of Ukraine. Classifier of Professions DK 003:2010. Specialists can perform the following professional work: research assistant (territorial and spatial planning of land use); design engineer (development of land management projects for the planning of populated areas); research assistant (cartography, topography); land management and cadastre engineer; research engineer in the field of cadastre; engineer for the management and maintenance of automated cadastral information systems; professional in other fields of engineering; teacher at a higher education institution; May hold entry-level positions: research assistant; engineer; production unit manager; functional unit manager; lecturer, assistant at a higher education institution. Specialists can obtain qualification certificates as land surveyors and geodesists, qualification certificates as appraisers of land plots, appraisers in the areas of 'Appraisal of tangible assets' and "Appraisal of integral property complexes, shares, securities, property rights and intangible assets, including intellectual property rights."
Further education	Continuation of education for higher education seekers to obtain their first academic degree of Doctor of Philosophy.
	5 – Teaching and assessment
Teaching and learning	The program is delivered through a combination of lectures, seminars, practical classes, consultations, and internships, with a strong emphasis on personal development, collaborative and independent learning, as well as project-based work. Students are trained to critically evaluate their own work, provide constructive feedback on the work of others, and effectively incorporate feedback from peers and instructors. Students select their research focus during the first year of study. In the final year, the curriculum places greater emphasis on conducting the practical component of the research, composing the qualification thesis, and preparing its formal presentation.
Assessment	Current and interim assessment: oral questioning, testing of knowledge and skills, consultations to discuss the results of current and interim assessment. Final assessment in disciplines: defence of pre-test

	practice reports, tests, written examinations, seminars to discuss examination results. The certification of higher education applicants is carried out in the form of the defence of the final qualification work.
	6 – Programme competences
Integral competence	Ability to solve applied, research and innovative problems in the field of geodesy and land management.
General competencies (GC)	**GC01.** Ability to identify, pose and solve problems. **GC02.** Ability to communicate in a foreign language. **GC03.** Ability to develop and manage projects. **GC04.** Ability to generate new ideas (creativity). **GC05.** Ability to adapt and act in new situations. **GC06.** Commitment to preserving the environment.
Special (professional) competencies of the speciality (SC)	**SC01.** Ability to plan and carry out theoretical and applied research, create new knowledge and technologies in the field of geodesy and land management. **SC02.** Ability to critically reflect on current issues and promising areas of development in geodesy and land management and related fields of knowledge. **SC03.** Ability to effectively apply theories, principles and technologies of mathematics, natural, technical, social and economic sciences in solving complex problems of geodesy and land management. **SC04.** Ability to search for necessary information, select and apply modern methods of processing, analysing, evaluating and publishing data, in particular geospatial data and metadata, when solving complex problems in geodesy and land management. **SC05.** Ability to justify and evaluate methods of survey, exploration, testing, diagnostics, and monitoring of geodesy and land management objects. **SC06.** Ability to develop and implement projects in the field of geodesy and land management, as well as related interdisciplinary areas, taking into account technical, economic, social, legal and environmental aspects. **SC07.** Ability to organise activities and effectively manage complex and/or unpredictable work processes in the field of geodesy and land management. **SC08.** Ability to protect intellectual property and commercialise the results of research, invention and project activities.

	SC09. Ability to develop and apply new strategic approaches to solving problems in the field of geodesy and land management. **SC10.** Ability to identify and assess the impact of real estate objects on the natural environment, as well as the impact of environmental factors on the monetary valuation of land plots. **SC11.** Mastery of modern approaches, methods and models, analytical tools and information technologies for the assessment and analysis of property objects and rights to them for civil law objects of all forms of ownership for specific purposes provided for by civil and other legislation of Ukraine. **SC12.** Ability to make practical recommendations on the use of scientific research results.
7	**– Programme learning outcomes**
	PLO01. Have specialised conceptual knowledge, including modern scientific achievements in the field of geodesy and land management, sufficient to conduct research and implement innovations. **PLO02.** Communicate fluently, both orally and in writing, in the national and foreign languages on issues related to professional activities, research and innovation in the field of geodesy and land management. **PLO03.** Make effective decisions to solve applied, research and/or innovative problems in the field of geodesy and land management, analyse alternatives, make forecasts, assess risks, particularly in conditions of incomplete or contradictory information and ambiguous requirements. **PLO04.** Build and explore conceptual, mathematical and computer models of objects and processes, apply them to create innovations in the field of geodesy and land management. **PLO05.** Create and develop geospatial data infrastructures, process and publish geospatial data and metadata related to geodesy and land management. **PLO06.** Cooperate with customers and contractors, prepare tender proposals in the field of geodesy and land management, and conclude relevant contracts. **PLO07.** Justify the choice of equipment, technologies and processes for production management and research in the field of geodesy and land management and related fields.

	PLO08. Develop and manage projects taking into account technological conditions and requirements for production management in the field of geodesy and land management and related interdisciplinary areas, taking into account economic, social, environmental and legal aspects; prepare technical specifications, project funding applications, carry out work planning, plan resources and manage them. **PLO09.** Develop and implement measures for operational and long-term management, forecasting and planning of geodesy, cartography and land management production, taking into account available resources and time constraints. **PLO10.** Protect intellectual property, commercialise the results of research, invention and design activities. **PLO11.** Perform comprehensive analysis and assessment of the state of geodesy and land management objects and evaluate the consequences of the implementation of practical measures. **PLO12.** Clearly and unambiguously communicate one's knowledge, conclusions and arguments in the field of geodesy and land management to specialists and non-specialists, in particular to students. **PLO13.** Conduct surveys, tests, diagnostics, and monitoring of geodesy and land management objects, develop land protection measures, and assess their consequences. **PLO14.** Critically reflect on current problems and promising areas of development in geodesy and land management, as well as related interdisciplinary issues. **PLO15.** Be able to develop a planning and cartographic basis for land management and cadastral surveys using telecommunications systems, geoinformation systems and aerospace survey materials. **PLO16.** Be prepared for professional scientific and pedagogical activity.
8 – Resource support for programme implementation	
Staffing	Specialists are trained at specialised departments of the faculty. All scientific and pedagogical staff involved in the implementation of the educational component of the educational and professional programme have scientific degrees and academic titles and are full-time employees of the State Biotechnological University. All scientific

	and pedagogical staff have a proven level of scientific and professional activity. Project team: 1 Doctor of Science, Professor, 3 Candidates of Science, Associate Professors. Guarantor of the educational programme (project team leader): Head of the Department of Land Resources Management, Geodesy and Cadastre, Professor, Doctor of Economics Iryna Vitaliivna Koshkalda. Project group leader: Head of the Department of Land Resources Management, Geodesy and Cadastre, Doctor of Economics, Professor Iryna Vitaliivna Koshkalda. Project group members: Olena Anatoliivna Dombrovska, Associate Professor of the Department of Land Resources Management, Geodesy and Cadastre, Candidate of Economics, Associate Professor; Serhii Oleksandrovych Vynohradenko, Associate Professor of the Department of Land Resources Management, Geodesy and Cadastre, Candidate of Economic Sciences, Associate Professor; Tetiana Volodymyrivna Anopriienko, Associate Professor of the Department of Land Resources Management, Geodesy and Cadastre, Candidate of Economic Sciences, Associate Professor.
Material and technical support	The availability of classrooms, computer workstations, laboratories, training grounds, equipment, multimedia equipment, and other facilities necessary for the implementation of educational programmes meets the needs. All necessary social and domestic infrastructure is available, and the number of places in dormitories meets the requirements and needs. The global Internet network is actively being introduced into the educational and research process. The university has the necessary facilities and organises student sports clubs and sections, which allows it to fully meet the educational needs of students in terms of physical education and sports. The university encourages students to participate in competitions (including at the international level).
Information and educational support	Use of the Educational Environment of the State Biotechnological University and Proprietary Developments of the University's Academic Staff The official website of the State Biotechnological University (https://biotechuniv.edu.ua) provides comprehensive information on educational programs, academic, research, and educational activities, structural

	divisions, admission regulations, and contact details. All registered university users have unlimited access to the Internet. A distinctive feature of the Scientific Library of the State Biotechnological University (SBTU) is that, in 2021, it integrated the documentary and electronic resources of four university libraries—KhNTUSG, KhNAU, HDZVA, and HDUHT. The library's collections comprise 1,489,002 items, including 515,464 scientific, 756,951 educational, 160,110 fiction, and 23,311 rare and valuable editions. The Scientific Library actively develops information and communication technologies, including: establishing a dedicated website (https://library.btu.kharkov.ua); developing the institutional repository of SBU and integrating materials from four repositories: Open Archive KhNTUA (http://dspace.khntusg.com.ua/) – 15,633 documents; irHDUHT (https://elib.hduht.edu.ua) – 5,884 documents; eKhNAUIR (http://dspace.knau.kharkov.ua/jspui/) – 2,860 documents; repoHDZVA (http://repository.hdzva.edu.ua/) – 887 documents; creating an electronic library of educational and teaching materials developed by the university's faculty; establishing full-text databases to support research activities, such as "Dissertations and Dissertation Abstracts" and "Patent Documents"; forming a scientific and informational system of secondary resources in the form of bibliographic publications, including the ongoing series of scholarly reference indices "Works of SBTU Departments" and "Publications of SBTU Scholars." The library also possesses extensive experience in organizing access to electronic full-text and abstract scientific resources, as well as to international scientometric databases, including Web of Science, Scopus, Springer Link, Wiley (trial access), ScienceDirect, and Bentham Science. In 2022, SBTU gained access to the Research4Life platform. An internal system of quality assurance in education and

	a Center for Educational Quality Management operate within the university. The evaluation of academic and teaching staff is conducted through a rating-based system, while professional development of academic personnel is carried out in accordance with current legislation.
9 – Academic mobility	
National credit mobility	Based on bilateral agreements between the State Biotechnological University and higher education institutions in Ukraine, in accordance with the Regulations on Academic Mobility of Students at the State Biotechnological University. Leading specialists from Ukrainian universities may be involved in supervising the research work of students on the basis of individual agreements. Credits obtained at other Ukrainian universities may be transferred, provided that the competences acquired are equivalent.
International credit mobility	Within the framework of international programmes based on bilateral agreements between the State Biotechnological University and higher education and scientific institutions of partner countries, in accordance with the Regulations on Academic Mobility of Students of the State Biotechnological University.
Education of foreign applicants for higher education	Foreign applicants for higher education can study under general conditions with additional language training.

1. List of components of the educational and professional programme and their logical sequence

2.1 List of EP components

Code z/p	Components of the educational programme (academic disciplines, course projects (assignments), internships, qualification work)	Number of credits	Form of final assessment
1. General training cycle			
1.1. Mandatory components common to all educational programmes in the speciality			
OKBP 1	Land resource management	6	Exam.
OKBP 2	Licensing and Patenting of Scientific Outputs in the Fields of Geodesy, Land Management, and Land Valuation	3	Credit
OKBP 3	Information Technologies in Scientific Research in the Fields of Geodesy, Land Management, and Land Valuation	3	Exam.
OKBP 4	Methodology and Methods of Scientific Research in the Field of Geodesy, Land Management, and Land Valuation	3	Credit
OKBP 5	Organization of Scientific and Production Activities in Geodesy, Land Management, and Land Appraisal	3	Exam.
Total for item 1.1.		***18***	
1.2. Academic disciplines of professional and practical training (compulsory)			
OKPPP 1	Real estate appraisal methodology	3	Exam.
OKPPP 2	Property appraisal and market analysis	6	Credit
OKPPP 3	Geoinformation technologies in the field of geodesy, land management and real estate valuation	3	Exam.
OKPPP 4	Rural development and land consolidation	3	Exam.
OKPPP 5	Land management analysis	3	Exam.
OKPPP 6	Urban planning	6	Exam., coursework
OKPPP 7	Pre-examination practice	9	Credit
OKPPP 8	Qualification work	15	Defense
Total for item 1.2.		**48**	
Total volume of mandatory components:		***66***	
2. Selective components			
Total volume of selected components:		***24***	
TOTAL SCOPE OF THE EDUCATIONAL PROGRAMME		**90**	

2.2. Structural and logical diagram of the educational programme

<table>
<tr><td colspan="2">I course</td><td>II course</td></tr>
<tr><td>I semester</td><td>II semester</td><td>I semester</td></tr>
<tr><td colspan="3">Compulsory academic disciplines</td></tr>
<tr><td colspan="3">Mandatory components common to all educational programmes in the speciality</td></tr>
<tr><td>Land resource management</td><td>Licensing and Patenting of Scientific Outputs in the Fields of Geodesy, Land Management, and Land Valuation</td><td rowspan="2">Organization of Scientific and Production Activities in Geodesy, Land Management, and Land Appraisal</td></tr>
<tr><td>Methodology and Methods of Scientific Research in the Field of Geodesy, Land Management, and Land Valuation</td><td>Information Technologies in Scientific Research in the Fields of Geodesy, Land Management, and Land Valuation</td></tr>
<tr><td colspan="3">Academic disciplines of professional and practical training</td></tr>
<tr><td>Property appraisal and market analysis</td><td>Rural development and land consolidation</td><td>Geoinformation technologies in the field of geodesy, land management and real estate valuation</td></tr>
<tr><td>Real estate appraisal methodology</td><td>Land management analysis</td><td></td></tr>
<tr><td>Urban planning</td><td>Pre-examination practice</td><td>Qualification work</td></tr>
<tr><td colspan="3">Selective academic disciplines</td></tr>
<tr><td>Discipline 1</td><td>Discipline 2</td><td>Discipline 4</td></tr>
<tr><td></td><td>Discipline 3</td><td>Discipline 5</td></tr>
</table>

3. Attestation form for higher education applicants

Forms of attestation for higher education applicants	The certification of graduates of the educational programme ‘Land Management and Cadastre’ in the speciality G18 ‘Geodesy and Land Management’ is carried out in the form of defending a master's thesis and ends with the issuance of a standard document awarding a master's degree with the assignment of an educational qualification: Master of Geodesy and Land Management.
Requirements for certification	The assessment is conducted openly and publicly. The final assessment takes place publicly in accordance with the ‘Regulations on the Organisation of the Educational Process at the State Biotechnological University,’ the ‘Regulations on the Organisation of the Educational Process Using Distance Learning Technologies,’ the ‘Regulations on the Preparation and Defence of Qualification Works by Students of the State

	Biotechnological University,' and the 'Regulations on the Procedure for the Creation and Organisation of the Work of the Examination Commission for the Certification of Higher Education Applicants.' Checking for academic plagiarism is carried out in accordance with the 'Regulations on the organisation and procedure for checking for textual borrowings in academic texts of employees and higher education applicants'.

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

4.1. . Defining principles and procedures for ensuring quality in higher education	Quality assurance in education is carried out in accordance with the Code of Academic Integrity of the State Biotechnological University, the 'Regulations on Academic Integrity and Ethics in Academic Relations,' the 'Regulations on the Academic Integrity Promotion Group,' the Regulations on the Organisation and Procedure for Checking for Textual Borrowings in Academic Texts of Employees and Higher Education Applicants, the Regulations on Surveys on the Quality of Educational Activities, the Regulations on Conducting Internal Audits of the Education Quality System, the Regulations on the Council for Ensuring the Quality of Education, 'Regulations on the internal quality assurance system for higher education', 'Regulations on the education quality management centre', 'Regulations on the SBTU academic integrity, ethics and conflict management commission'.
4.2. Monitoring and periodic review of educational programmes	Monitoring and periodic review of educational programmes are carried out in accordance with the university's local regulatory documents. The mechanism for developing, approving, monitoring and periodically reviewing educational programmes is regulated by the 'Regulations on the Organisation of the Educational Process at the State Biotechnological University', the Regulations on the Organisation of the Educational Process Using Distance Learning Technologies, the Regulations on the Guarantor and the Educational Programme Improvement Group at the State Biotechnological University, and the Regulations on Educational Programmes. The 'Regulations on the Council for

	Quality Assurance in Education' and the criteria for reviewing educational programmes are formed as a result of feedback from scientific and pedagogical staff, higher education applicants, graduates and employers, as well as taking into account forecasts for the development of the industry and the needs of society. The university conducts an annual survey of higher education students, employers and graduates on the quality of educational programmes, the results of which are taken into account when reviewing them. The following regulations are in force: 'Regulations on Surveys on the Quality of Educational Activities', 'Regulations on Internal Auditing of the Education Quality System', 'Regulations on the Council for Quality Assurance in Education', 'Regulations on the Internal Quality Assurance System in Higher Education', and 'Regulations on the Centre for Quality Management in Education'.
4.3. Assessment of higher education applicants	The assessment of higher education applicants is carried out in accordance with the 'Regulations on the organisation of the educational process at the State Biotechnological University'.
4.4. Assessment of scientific, teaching and pedagogical staff	The assessment of the achievements of scientific and pedagogical staff takes place at the end of the calendar year in accordance with the 'Regulations on the rating system for assessing the activities of scientific and pedagogical staff of the State Biotechnological University.' The results of the assessment are published on the university's website. The rating system for evaluating the performance of scientific and pedagogical staff at the university measures their individual professional activity in accordance with the content of their scientific, educational, methodological, organisational and educational work and motivates them to increase the effectiveness of their professional activities.
4.5. Advanced training for scientific, pedagogical, and academic staff	Scientific and teaching staff involved in the educational process within the framework of the educational programme undergo professional development training at least once every five years. The procedure for professional development of teaching and scientific and teaching staff is regulated

	by the ‘Regulations on the professional development of teaching and scientific and teaching staff of the State Biotechnological University’.
4.6. Availability of information systems for effective management of the educational process	The educational process at the university is supported by: − computer systems, multimedia equipment; − unlimited access to the Internet; − the university website; − an electronic library; − access to open educational resources; − the Moodle distance learning platform.
4.7. Publicity of information about educational programmes, higher education degrees and qualifications	Information about educational programmes, higher education degrees and qualifications is available on the university's website.
4.8. Ensuring compliance with academic integrity by employees of higher education institutions and higher education seekers, including the creation and maintenance of an effective system for preventing and detecting academic plagiarism	Ensuring compliance with academic integrity by university employees and higher education applicants is regulated by the Code of Academic Integrity of the State Biotechnological University, the ‘Regulations on Academic Integrity and Ethics in Academic Relations’, the ‘Regulations on the Academic Integrity Promotion Group’, the Regulations on the Organisation and Procedure for Checking for Textual Borrowings in Academic Texts of Employees and Higher Education Applicants, the Regulations on Surveys on the Quality of Educational Activities, the Regulations on Conducting Internal Audits of the Education Quality System, the Regulations on the Council for Ensuring the Quality of Education, ‘Regulations on the internal quality assurance system for higher education’, ‘Regulations on the education quality management centre’, ‘Regulations on the SBTU academic integrity, ethics and conflict management commission’. The university has a system for preventing and detecting plagiarism in the work of employees and higher education applicants using specialised software.

5. Matrix of correspondence between software competencies and components of the educational programme

OPP code	Competencies																	
	Integral	General competencies						Special (professional) competencies										
		GC 01	GC 02	GC 03	GC 04	GC 05	GC 06	SC 01	SC 02	SC 03	SC 04	SC 05	SC 06	SC 07	SC 08	SC 09	SC 10	SC 11	SC 12
OKBP 1	+	+		+	+			+	+	+			+						
OKBP 2	+		+		+	+		+			+				+				+
OKBP 3	+			+	+	+		+		+	+							+	+
OKBP 4	+	+			+			+	+	+						+		+	+
OKBP 5	+	+		+		+		+	+	+				+			+	+	
OKPPP 1	+	+			+		+	+	+	+	+	+				+			+
OKPPP 2	+	+		+	+	+			+	+	+	+					+	+	+
OKPPP 3	+	+	+	+				+			+		+			+		+	
OKPPP 4	+	+		+	+	+	+	+	+	+	+		+		+	+			
OKPPP 5	+	+				+	+		+	+		+					+	+	
OKPPP 6	+	+		+	+		+	+		+			+			+			
OKPPP 7	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+	
OKPPP 8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

6. Matrix for ensuring programme learning outcomes (PLO) with relevant components of the educational programme

Programme learning outcomes	OKBP 1	OKBP 2	OKBP 3	OKBP 4	OKBP 5	OKPPP 1	OKPPP 2	OKPPP 3	OKPPP 4	OKPPP 5	OKPPP 6	OKPPP 7	OKPPP 8
PLO01	+	+	+	+	+		+		+	+		+	+
PLO02			+	+		+		+	-				+
PLO03	+		+	+	+	+	+		+	+	+	+	+
PLO04			+	+	+			+		+	+	+	+
PLO05					+		+	+	+		+	+	+
PLO06	+	+										+	+
PLO07			+					+	+		+	+	+
PLO08	+				+				+	+	+	+	+
PLO09	+				+							+	+
PLO10		+		+				+	+		+		+
PLO11					+		+	+	+	+	+	+	+
PLO12			+			+	+			+	+	+	+
PLO13				+		+	+	+	+		+	+	+
PLO14	+			+	+	+				+		+	+
PLO15								+	+		+	+	+
PLO16	+		+	+			+					+	+

7. Перелік нормативних документів, на яких базується освітньо-професійна програма

1. Law of Ukraine “On Higher Education” as amended on 24 March 2024. URL: https://zakon.rada.gov.ua/laws/show/1556-18#top.

2. Law of Ukraine “On Education” as amended on 24 March 2024. URL: https://zakon.rada.gov.ua/laws/show/2145-19#Text.

3. Law of Ukraine “On Licensing of Types of Economic Activity” as amended on 27 April 2024. URL: https://zakon.rada.gov.ua/laws/show/222-19#Text.

4. Resolution of the Cabinet of Ministers of Ukraine dated 29 April 2015 No. 266 “On Approval of the List of Fields of Knowledge and Specialties in which Higher Education Degrees are Conferred” (as amended on 21 December 2022). URL: https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF#Text.

5. Order of the Ministry of Education and Science of Ukraine dated 19 February 2015 No. 166 “On Certain Issues of Disclosure of Information about the Activities of Higher Education Institutions” as amended on 23 March 2015. URL: https://zakon.rada.gov.ua/rada/show/v0166729-15#Text.

6. Order of the Ministry of Education and Science of Ukraine dated 6 November 2015 No. 1151 “On the Peculiarities of Implementing the List of Fields of Knowledge and Specialties in which Higher Education Degrees are Conferred, Approved by the Resolution of the Cabinet of Ministers of Ukraine dated 29 April 2015 No. 266” as amended on 3 June 2016. URL: https://zakon.rada.gov.ua/laws/show/z1460-15#Text.

7. Order of the Ministry of Education and Science of Ukraine dated 1 June 2017 No. 600 (as amended by Order No. 1648 of 21 December 2017) “On Approval and Implementation of Methodical Recommendations for Developing Higher Education Standards” as amended on 30 April 2020. URL: https://zakon.rada.gov.ua/rada/show/v0600729-16#Text.

8. National Classifier of Ukraine: “Classifier of Occupations” DK 003:2010 as amended on 16 January 2024. URL: https://zakon.rada.gov.ua/rada/show/va327609-10#Text.

9. Letter of the Ministry of Education and Science of Ukraine dated 28 April 2017 No. 1/9-239. URL: https://udhtu.edu.ua/wp-content/uploads/2018/11/List-MON-1-9-239-vid-28-04-2017-zrazok-OP-bakalavr.pdf.

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