MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

STATE BIOTECHNOLOGICAL UNIVERSITY

EDUCATIONAL AND PROFESSIONAL PROGRAMME «FOOD TECHNOLOGY IN THE RESTAURANT INDUSTRY»

HIGHER EDUCATION LEVEL – Second

DEGREE OF HIGHER EDUCATION – Master's degree

SPECIALITY – G 13 (181) Food Technologies

AREA OF KNOWLEDGE – G «Engineering, Production and Construction»

EDUCATION QUALIFICATION – Master's degree in food technology specialising in food technology in the restaurant industry

APPROVED BY THE ACADEMIC BOARD
of the State Biotechnological University
protocol № __ « __» April 2025
implemented from «01» September 2025

Acting Rector Andriy Kudryashov

Kharkiv – 2025

PREFACE

Educational and professional programme (EPP) «Food technology in the restaurant industry» for training of Master's degree students in the speciality G 13 (181) "Food Technologies" of the field of knowledge G "Engineering, Production and Construction" is a document that defines the goals of educational and professional training, the content of training, the place of a specialist in the structure of the national sector of the state economy, requirements for his/her competences and other socially important properties and qualities.

The educational-professional program is developed on the basis of the higher education standard in specialty 181 "Food Technologies" of the field of knowledge 18 "Production and Technology" for the second (master's) level of higher education, approved by the Order of the Ministry of Education and Science of Ukraine [1] No. 1295 dated October 12, 2020, and taking into account the Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2025, No. 266, as amended by the Resolution of the Cabinet of Ministers No. 1300 dated November 15, 2024. On the approval of the list of fields of knowledge and specialties for which higher and professional pre-higher education is provided.

DEVELOPED BY THE PROJECT TEAM CONSISTING OF:

Hrynchenko O.O., doctor of technical sciences, professor, head of the department of food technologies in the restaurant industry (guarantor)

Fedak N.V., candidate of technical sciences, professor of the department of food technologies in the restaurant industry

Kolesnikova M.B., candidate of technical sciences, professor of the department of food technologies in the restaurant industry

Andreeva S.S., candidate of technical sciences, associate professor of the department of food technologies in the restaurant industry

Stakeholders:

Tyshchenko O.P., doctor of technical sciences, scientific consultant of "CAPS FOOD SYSTEM" LLC;

Plotnikova R.V., candidate of technical sciences, Novonesis technology engineer (Senior Sales Engineer – Food & Beverage Biosolutions Food & Beverage Biosolutions)

EXTERNAL STAKEHOLDER REVIEW-FEEDBACK:

Kravchenko M.F., doctor of technical sciences, professor, professor of the department of technology and organization of restaurant business of the State university of trade and Economics;
Vitanova O.D., Head of Production of "CAPS FOOD SYSTEM" LLC.

Review-feedback from external stakeholders is attached.

1. PROFILE OF THE EDUCATIONAL-PROFESSIONAL PROGRAM "FOOD TECHNOLOGIES IN THE RESTAURANT INDUSTRY" OF SPECIALTY G 13 "FOOD TECHNOLOGIES"

1. General description	
Full name of the higher education institution and structural department	State Biotechnological University Faculty of Processing and Food Production
Higher education degree	Master's degree Master's degree in food technology with a specialisation in food technology in the restaurant industry
Official name of the educational programme	Food technology in the restaurant industry
Type of diploma and duration of the educational programme	Master's Degree, duration of study 1 year 4 months. The scope of the master's degree programme is 90 ECTS credits. At least 35% of the curriculum is aimed at ensuring general and special (professional) competencies in the speciality defined by the Higher Education Standard.
Accreditation status	Accreditation Certificate UD No. 21015728 dated November 19, 2021.
Cycle / level	NQS Ukraine – 7 level, FQ -EHEA - second cycle, EQF-LLL – 7 level
Background	A person has the right to receive the second (master's) level of higher education provided that he/she has a bachelor's (specialist's) degree confirmed by a state-issued document issued by a higher education institution of the III-IV accreditation level) Admission conditions are determined by the "Rules of Admission to the State Biotechnological University" approved by the Academic Board https://biotechuniv.edu.ua/abituriyentu/umovi-i-pravila-prijomu/
Languages of instruction	Ukrainian, English
The validity of the educational programme	Until 31 of December 2026.
Internet address of the permanent placement of the description of the educational programme	http://btu.kharkov.ua/pro-universitet/osvitnya-diyalnist/osvitni-programi/
2. The purpose of the educational and professional programme	
Preparation of highly qualified specialists of a high level, competitive in the domestic and international labor market, who possess integral, general, and special competen-	

cies and are able to integrate their knowledge to solve complex tasks of food enterprises and restaurant industry establishments, which involves research and innovation activities to meet the value expectations of stakeholders and is characterized by uncertainty of conditions and requirements.	
3. Description of the educational and professional programme	
Subject area (field of knowledge, speciality)	Engineering, Production and Construction Food technology Food technology in the restaurant industry
Description of the subject area	*Objects of study and activity* of master's food technologie specializing in food technologies in the restaurant industry are: research, pedagogical, organizational and technological, project and technological, organizational and managerial systems of functioning of restaurant industry establishments, organizations and institutions of all forms of ownership under conditions of uncertainty of conditions and requirements. *Aims of the study:* formation of students' integral, general and special competencies in higher education applicants, necessary for solving complex problems of food enterprises and restaurant industry establishments, which involves research and innovation activities and is characterized by uncertainty of conditions and requirements. *Theoretical content of the subject area:* - theoretical, methodological and applied aspects of food technologies; - a deep understanding of the structure, management and optimisation of technological processes, principles of design and operation of food and restaurant industry enterprises; - methodology for arranging and controlling the appropriate level of quality and safety of food and restaurant industry products, environmental safety and resource saving of their production; - scientific and methodological principles of research and innovation activities; - implementation of design and research works related to the study of technological processes, introduction of new and improvement of existing food technologies in the restaurant industry and food enterprises. *Methods, techniques and technologies (to be mastered by the student for practical application)*: a complex of technological, research, innovative and

	marketing methods, techniques and technologies to improve the efficiency of functioning and strategic development of food and restaurant industry enterprises. *Tools and equipment:* modern technological and laboratory equipment and devices, computer and information technology.
Orientation of the educational and professional programme	Educational and professional
Focus of the educational and professional programme	The educational and professional programme is aimed at acquiring knowledge and skills in the field of restaurant and food industry and provides for the possibility of further education and career development (continuing education at the third educational and scientific level of higher education (PhD)). The programme allows to form competences, obtain deep knowledge and skills in scientific substantiation, development and improvement of food technologies; ensuring the quality and safety of food products in the technological flow of their production; comprehensive assessment of innovations in terms of technological processes efficiency, resource saving, import substitution, environmental safety; ensuring the design, technological and managerial functioning of the restaurant industry.
Programme features	The educational-professional program is aimed at training a master who will possess fundamental and professionally-oriented knowledge of the production technologies of restaurant industry establishments and food enterprises, and provides in-depth theoretical and practical training for conducting project-technological, production-technological, and research works using the latest achievements of science and industry, modern information and communication technologies. The educational-professional program is based on the university's many years of experience in training specialists for the restaurant industry and involves the use of non-formal education, the involvement of practicing specialists in the educational process, conducting master classes and seminars at industry enterprises, practical training of students at domestic and foreign food industry enterprises and in restaurant industry establishments, the possibility of foreign internships, and the use of modern technological and

	laboratory equipment.
4 Recruitment of graduates and further education	
Employability	A Master of Food Technologies with a specialization in "Food Technologies in the Restaurant Industry" may work in the scientific, educational, and production sectors; in teaching, research, engineering, and administrative positions in higher, professional pre-higher, and vocational education institutions, research institutions, in public authorities and local self-government bodies, and in enterprises of any organizational and legal form and in any type of economic activity in accordance with the National Classifier of Ukraine "Classification of Occupations" DK 003:2010 and the requirements of the labor market. Scientific, educational, analytical, expert, consulting, and managerial activities in the field of food technologies and the restaurant industry. Continuation of studies at the third (educational and scientific) level of higher education, as well as professional development and obtaining additional postgraduate education.
5 Teaching and assessment	
Teaching and learning	Student-centred (teacher-led and problem-based) training, which is conducted in the form of lectures, seminars, practical classes, consultations, master classes, coursework, self-study of material provided in textbooks, manuals, lecture notes, periodicals, use of the Internet, training in the Moodle system, self-study, trainings, preparation of a qualifying master's thesis.
Assessment	*Assessment* is based on the 100-point ECTS scale, the national 4-point scale ("excellent", "good", "pass", "unsatisfactory") and verbal ("pass", "fail") systems. *Types of control:* ongoing and final (exam, credit test, practice reports, thesis defence, master's degree certification).
6 Programme competencies	
Integral competence (IC)	Ability to solve research and/or innovation problems in the field of food technology in restaurant industry.
General competences (GC)	GC 1. Ability to search, process and analyse information from various sources. GC 2. Ability to carry out research at the appropriate level. GC 3. Ability to generate new ideas (creativity).

	GC 4. Ability to act in a socially responsible and conscious manner. GC 5. Ability to work in an international environment.
Special (professional, subject) competences (SC)	SC 1. Ability to choose and apply specialized laboratory and technological equipment and devices used by restaurant industry establishments, scientifically sound methods and software for conducting scientific research in the field of food technologies and the restaurant industry. SC 2. Ability to plan and conduct scientific research, taking into account global trends in the scientific and technological development of the industry and the restaurant industry. SC 3. Ability to protect intellectual property in the field of food technologies and the restaurant industry. SC 4. Ability to develop programs for the effective functioning of restaurant industry establishments in accordance with industry development forecasts in the context of globalization. SC 5. Ability to present and discuss the results of scientific research and projects. SC 6. Ability to ensure the quality and safety of food products during the implementation of technological innovations in [1] industry enterprises, particularly in the restaurant industry.
7 Programme learning outcomes (LO)	
	LO 1. Search, systematise and analyse scientific and technical information from various sources to solve professional and scientific problems in the field of food technology and restaurant industry. LO 2. To make effective decisions, evaluate and compare alternatives in the field of food technology, focusing on restaurant industry technologies, including in uncertain situations and with risks, as well as in interdisciplinary contexts. LO 3. To apply special equipment, modern methods and tools, including mathematical and computer modelling to solve complex problems in food technology and restaurant industry. LO 4. Apply statistical methods for processing experimental data in the field of food technologies, particularly in the restaurant industry, use software for processing experimental data. LO 5. Select and implement effective technologies, equipment and rational production management methods in production activities, taking into account global trends in the development of food technologies and the restaurant industry. LO 6. Develop and implement development programs for industry enterprises, including the restaurant industry, for the short and long term, analyze and eval-

	uate their effectiveness, environmental and social consequences. LO 7. Have specialized conceptual knowledge that includes modern scientific achievements in the field of food technologies, in particular restaurant industry technologies, clearly and unambiguously convey their own knowledge, conclusions and arguments to specialists and non-specialists. LO 8. Protect intellectual property in the field of food technologies and the restaurant industry, conduct relevant patent research, prepare documents for obtaining patents for inventions and utility models. LO 9. To be fluent in the state and foreign languages to discuss professional activities, research results and innovations in the field of food technology and restaurant industry. LO 10. To plan and carry out scientific research in the field of food technology, with an emphasis on restaurant industry technologies, analyse the results, and argue conclusions. LO 11. Assess and eliminate risks and uncertainties when making technological and organizational decisions in production conditions to ensure the quality and safety of food products, particularly in the restaurant industry.
8 Resource support for the programme	
Human resources support	Staffing of the educational-professional program meets licensing requirements. (Resolution of the Cabinet of Ministers of Ukraine "On Approval of Licensing Conditions for Educational Activities" dated December 30, 2015, No. 1187, as amended by the Resolution of the Cabinet of Ministers of Ukraine dated March 24, 2021, No. 365). 1 The percentage of teachers with academic titles and scientific degrees is at least 75%.
Material and technical support	To achieve the goals, objectives, and program learning outcomes, the faculty building functions, equipped with multimedia-equipped classrooms; educational and research specialized laboratories, it is possible to conduct research in stakeholder laboratories on laboratory equipment and pilot lines. The total area occupied by the Department of Food Technologies in the Restaurant Industry is 626.3 m2. The department includes laboratories for theoretical food production technologies, a rheological research laboratory, a food product development and research laboratory (R&D Lab), an information and communication technology laboratory, and a sensory evaluation laboratory for food products. The provision of dormitories for higher education students is 100%. Students have free wireless Internet access. The level of multimedia technical equipment is suf-

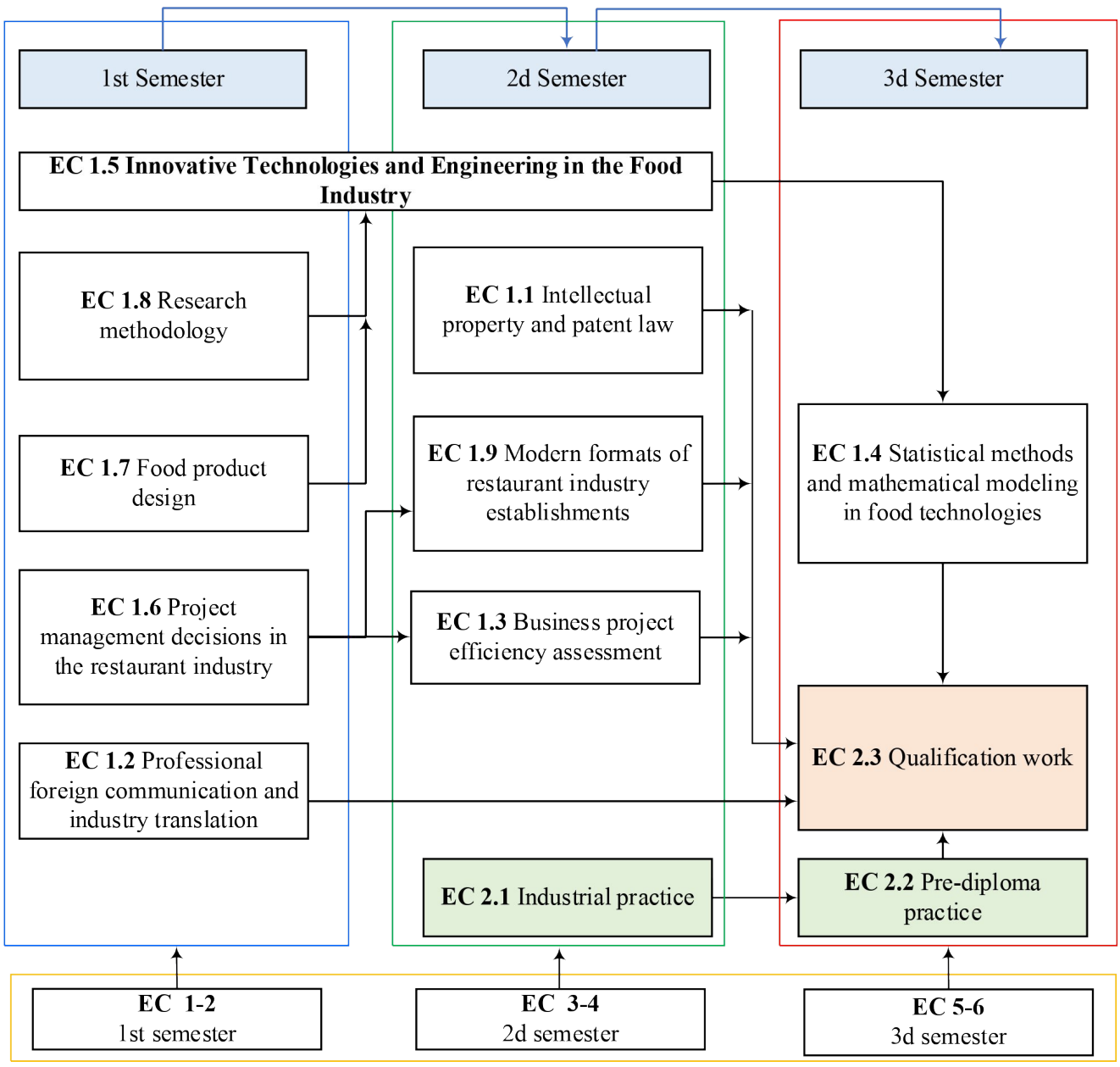
	ficient for the educational process.
Information, training and methodological support	Information support is provided through free access to the Internet; the use of the official website (http://btu.kharkov.ua/) and official pages of the faculty and departments, information resources of the Scientific Library of SBTU (http://btu.kharkov.ua/nauka/naukova-biblioteka/), including the institutional repository with the content of materials from four repositories (Open Archive KhNTUA, irHDUHT, eKhNAUIR, repoHDZVA) and free access to the Scopus and Web of Science scientometric databases; educational and methodological packages of the educational process in the Moodle virtual learning environment. Each educational component has complete information and methodological support, which includes library collections and electronic resources.
9 Academic mobility	
National mobility	All students have the opportunity to attend individual courses in partner universities within the framework of national academic mobility, study for a semester with further recognition of the results and credit transfer. The principles of academic mobility are determined by the legislation of Ukraine. The possibility of studying in several specialities or in several universities at the same time is determined by the legislation of Ukraine.
International mobility	The principles of international academic mobility are determined by the legislation of Ukraine, other countries and agreements between states. Every student has the opportunity to get their credits/terms of study recognised.
Training of foreign higher education students	The programme provides training opportunities for foreign citizens

2 LIST OF COMPONENTS OF THE EDUCATIONAL AND PROFESSIONAL PROGRAMME

2.1 List of components of the EPP

Code	Components of the educational programme (academic disciplines, course projects, internships, qualification work)	Credit score	Final control form
Mandatory components of the EPP			
EC 1.1	Intellectual property and patent law	3	credit differential
EC 1.2	Professional foreign communication and industry translation	3	credit differential
EC 1.3	Business project efficiency assessment	5	exam, exam, CW
EC 1.4	Statistical methods and mathematical modeling in food technologies	3	credit
EC 1.5	Innovative technologies and engineering in the food industry	5	exam, exam, CP
EC 1.6	Project management decisions in the restaurant industry	4	exam
EC 1.7	Food product design	5	exam
EC 1.8	Research methodology	5	credit differential
EC 1.9	Modern formats of restaurant industry establishments	4	credit
EC 2.1	Industrial practice	6	credit differential
EC 2.2	Pre-diploma practice	3	credit differential
EC 2.3	Qualification work	16	attestation EC
The total amount of mandatory components:		66	
Selective components of the EPP			
The total amount of selected components:		**24**	credit
TOTAL AMOUNT OF THE EDUCATIONAL PROGRAMME		**90**	

2.2 Flowchart of the EPP structure



3. FORM OF ATTESTATION OF HIGHER EDUCATION STUDENTS

Forms of attestation of higher education students	The final attestation is carried out on the basis of the assessment of learning outcomes and the level of competencies, this educational and professional programme in the form of a public defence of the qualification work.
Requirements for qualification work and the procedure for its defence	The qualification work must be aimed at solving a complex, challenging task or problem in the field of food technologies and the restaurant industry, which involves conducting research and/or implementing innovations, characterized by uncertainty of conditions and requirements. The qualification work must not contain academic plagiarism, fabrication, or falsification. The plagiarism check procedure is determined by SBTU and is carried out through the Strikeplagiarism software and computing complex. The procedure and requirements for publication are determined by SBTU.

4. REQUIREMENTS FOR THE AVAILABILITY OF AN INTERNAL QUALITY ASSURANCE SYSTEM FOR HIGHER EDUCATION

The university's internal quality assurance system for educational activities and higher education quality (internal quality assurance system) at the State Biotechnology University includes the implementation of the following procedures and measures provided by the Law of Ukraine "On Higher Education":

1) defining the principles and procedures for ensuring the quality of higher education;
2) monitoring and periodic review of educational programs;
3) annual evaluation of higher education students, academic and pedagogical staff of the university and regular publication of the results of such evaluations on the official website of the university, on information stands, etc.;
4) ensuring the professional development of academic and pedagogical staff;
5) ensuring the availability of necessary resources for the organization of the educational process, including independent work of students, 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 the scientific works of university employees and higher education students;

other procedures and measures.

The university's system for ensuring the quality of educational activities and the quality of higher education (internal quality assurance system) is evaluated by the National Agency for Higher Education Quality Assurance or accredited independent institutions for the evaluation and quality assurance of higher education for its compliance with the requirements for the higher education quality assurance system, approved by the National Agency for Higher Education Quality Assurance, and international standards and recommendations for higher education quality assurance.

5. LIST OF REGULATORY DOCUMENTS ON WHICH THE EDUCATIONAL-PROFESSIONAL PROGRAM IS BASED

1. Standard of Higher Education of Ukraine of the second (master's) level, master's degree, field of knowledge "Production and Technology", specialty "Food Technologies". Ministry of Education and Science of Ukraine. Kyiv. 2020. 14 p. – Access mode: https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/10/23/181-Kharchov.tekhn.mahistr.1.pdf.

2. Law of Ukraine "On Higher Education" (dated 01.07.2014 No. 1556-VII). – Access mode: http://zakon4.rada.gov.ua/laws/show/1556-18.

3. Law of Ukraine "On Education" (dated 05.09.2017 No. 2145-VIII). – Access mode: http://zakon5.rada.gov.ua/laws/show/2145-19.

4. National Classifier of Ukraine. Classifier of Professions DK 003:2010. – Access mode: https://zakon.rada.gov.ua/rada/show/va327609-10#Text.

5. Resolution of the Cabinet of Ministers of Ukraine dated 23.11.2011 No. 1341 "On approval of the National Qualifications Framework". – Access mode: http://zakon4.rada.gov.ua/laws/show/1341-2011-п.

6. Resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 No. 266 "On approval of the list of fields of knowledge and specialties for which higher education students are trained". – Access mode: https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF#Text.

7. Resolution of the Cabinet of Ministers of Ukraine dated 16.12.2022 No. 1392 "On amendments to the list of fields of knowledge and specialties for which higher education [1] students are trained". – Access mode: https://zakon.rada.gov.ua/laws/show/1392-2022-%D0%BF#Text.

8. Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2025 No. 266, as amended by the Resolution of the Cabinet of Ministers No. 1300 dated November 15, 2024. On the approval of the list of fields of knowledge and specialties for which higher and professional pre-higher education is provided. Access mode:https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF#n11

Table 1

Matrix of compliance of the competences defined by the standard with the descriptors of the National Qualifications System (NQS) of Ukraine

Classification of competences according to the NQS	**Knowledge** **Kn1** Specialised conceptual knowledge that includes modern scientific achievements in the field of professional activity and is the basis for original thinking and research. **Kn2** Critical understanding of problems in the industry and at the boundaries of knowledge fields.	**Skills** **Sk1** Specialised problem-solving skills required to carry out research and/or innovation activities to develop new knowledge and procedures. **Sk2** Ability to integrate knowledge and solve complex problems in wide or multidisciplinary contexts. **Sk3** Ability to solve problems in new or unfamiliar conditions with incomplete or limited information, considering aspects of social and ethical responsibility	**Communication** **C1** Clear and unambiguous communication of own knowledge, conclusions and arguments to specialists and non-specialists, including students. **C2** Using foreign languages in professional activities.	**Autonomy and responsibility** **AR1** Management of work and learning processes that are complex, unpredictable and require new strategic approaches. **AR2** Responsibility for contributing to professional knowledge and practice and/or evaluating the results of teams and collectives. **AR3** Ability to continue learning with a high level of autonomy.
General competences				
GC 1.	Kn1, Kn2	Sk3	C2	AR3
GC 2	Kn1	Sk1, Sk3	-	AR2
GC 3	Kn1	Sk1, Sk2	-	AR3
GC 4	Kn2	Sk3	-	AR2
GC 5	Kn1	Sk2, Sk3	C2	AR3
Special (professional) competences				
SC 1	Kn1, Kn2	Sk1	-	AR1
SC 2	Kn1	Sk1	-	AR1
SC 3	Kn1	Sk1	C1, C2	AR2
SC 4	Kn2	Sk2	C1, C2	AR2
SC 5	Kn2		C1, C2	AR3
SC 6	Kn2	Sk3	-	AR1, AR2

Table 2

Matrix of correspondence between learning outcomes and competences defined by the EPP

Learning outcomes	Competences										
	Integral competence										
	General competences					Special (professional, subject) competences					
	GC1	GC2	GC3	GC4	GC5	SC1	SCK2	SC3	SC4	SC5	SC6
LO 1	+			+	+		+	+			
LO 2		+		+	+		+	+			+
LO 3			+			+			+		
LO 4			+			+			+		
LO 5	+	+		+	+	+		+			+
LO 6		+		+				+			
LO 7										+	
LO 8	+			+			+				
LO 9					+					+	
LO 10			+	+		+			+	+	
LO 11		+	+			+					+

Table 3

Matrix of ensuring the learning outcomes (LO) with the relevant components of the educational and professional programme

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7	LO 8	LO 9	LO 10	LO 11
Normative components											
EC 1.1	+	+			+			+			
EC 1.2	+						+		+		
EC 1.3	+	+		+	+	+	+				+
EC 1.4			+	+						+	
EC 1.5	+	+	+	+	+	+	+	+		+	+
EC 1.6	+	+	+	+	+	+				+	+
EC 1.7	+	+	+	+	+	+				+	+
EC 1.8	+	+	+	+	+	+	+	+		+	+
EC 1.9	+	+	+		+	+	+			+	+
EC 2.1		+			+	+					+
EC 2.2	+	+	+	+	+	+				+	+
EC 2.3	+	+	+	+	+	+	+	+	+	+	+

Table 4

Matrix of providing programme competences with relevant components of the educational and professional programme

Code	IC	General competences					Special (professional, subject) competences					
		GC1	GC2	GC3	GC4	GC5	SC1	SC2	SC3	SC4	SC5	SC6
EC 1.1	+	+	+		+	+	+	+	+			+
EC 1.2	+	+			+	+		+	+		+	
EC 1.3	+	+	+	+	+	+	+	+	+		+	
EC 1.4	+			+	+		+			+	+	
EC 1.5	+	+	+	+	+	+	+	+	+	+	+	+
EC 1.6	+	+	+	+	+	+	+	+	+	+		+
EC 1.7	+	+	+	+	+	+	+	+	+	+	+	+
EC 1.8	+	+	+	+	+	+	+	+	+	+	+	+
EC 1.9	+	+	+	+	+	+	+	+	+	+	+	+
EC 2.1	+	+	+		+	+	+	+	+			+
EC 2.2	+	+	+	+	+	+	+	+	+	+	+	+
EC 2.3	+	+	+	+	+	+	+	+	+	+	+	+