

"Kazakh University of Technology and Business named after K.Kulazhanov" JSC

EDUCATIONAL PROGRAM

7M07239 Technology of food products

Level: Master's (scientific and pedagogical track)

Approved
by the Board of Directors of JSC
«K.Kulazhanov KazUTB» 18.03 2026,
protocol No. 7

Recommended
by the Academic Council of JSC
«K.Kulazhanov KazUTB» 24.02 2026,
protocol No. 7

Astana – 2026

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CONTENT

Preface	3
Approval sheet	4
1 Passport of the educational program	5
2 Qualification characteristics of a graduate of an educational program	6
3 Requirements for the content of the educational program	6
4 Competency map of the educational program	7
5 Learning outcomes of the educational program and modules	9
6 The relationship between the attainability of the formed learning outcomes according to the educational program and academic disciplines	13
7 Alignment of planned learning outcomes with assessment technologies and teaching methods within the module	25
8 Correlation of learning outcomes of the educational program with the labor functions of professional standards (if any)	
9 Graduate model	27
10 Typical curriculum (appendix to the OP)	29
11 Expert opinion	31

Preface

The educational program **7M07239 Technology of food products** was developed in accordance with the State Compulsory Standard of Higher Education / Postgraduate Education, approved by the order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2, as well as on the basis of professional standards and also based on professional standards:

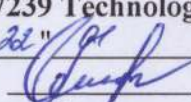
1. Production of Public Catering Products, dated December 27, 2019, and updated in 2025 in accordance with Order No. 477 of the Minister of Agriculture of the Republic of Kazakhstan dated December 19, 2025 (Enterprise Director);

2. Teacher (Academic and Teaching Staff) of Higher and/or Postgraduate Education Organizations, approved by Order No. 591 of the Minister of Science and Higher Education of the Republic of Kazakhstan dated November 20, 2023.

Atlas of New Professions and Competencies — in accordance with Order No. 477 of the Minister of Agriculture of the Republic of Kazakhstan dated December 19, 2025 (Enterprise Director), as well as the Regional Atlas of New Professions and Competencies of the Ulytau Region (Specialist in Agricultural Product Quality Control).

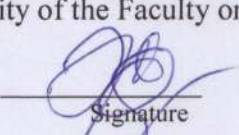
The educational program **7M07239 Technology of food products** was approved at the meeting of the Council Academic Quality on "22" 09 2026, protocol No. 3

Chairman E.B. Askarbekov
S.N.P.


Signature

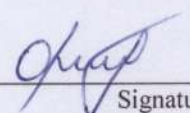
The educational program **7M07239 Technology of food products** was approved at the meeting of the Commission on Academic Quality of the Faculty on "19" 12 2026, protocol No. 4

Chairman Zh.Safuani
S.N.P.


Signature

The educational program **7M07239 Technology of food products** was developed and discussed at the meeting of the department "Technology and standardization" dated "14" 02 2026, protocol No. 7

Head of the department A. Orazov
S.N.P.


Signature

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 01.12-2025	
Educational program	Edition № 4	

Approval sheet

Educational program **7M07239 Technology of food products**

AGREED:

Vice-Rector for
Administrative Affairs

 E. Askarbekov

"22" 01 2026 year

Head of Educational
Programs Department

 B. Bayadilova

"22" 01 2026 year

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Director of
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 M. Mukanov

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Master's student

 Zh. Chakanova

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1 Passport of the educational program

International Standard Classification of Education (ISCED) level	7
National Qualification Framework (NQF) level	7
Sectoral Qualifications Framework (SQF) level	7
Code and name of the field of education	7M07 - Engineering, Manufacturing and Civil engineering
Direction of training	7M072 - Industrial and manufacturing branches
Number and name of the group of educational programs	M111 - Food production
Code and name of the educational program (EP)	7M07239 Technology of food products
Educational program profile	Scientific & pedagogical direction
goal of the educational program	Training of highly qualified specialists in the field of food technology, possessing professional competencies, capable of solving modern scientific, pedagogical and practical problems of the food industry
completion criterion of an educational program	At least 120 academic credits, including all types of student's academic activities
language of instruction of the educational program	Kazakh, Russian
Distinctive features of the educational program	-
Partner University	-

2 Qualification characteristics of a graduate of an educational program

Degree awarded	Master of Technical Sciences in the educational program 7M07239 Technology of food products
Field of professional activity	- centers for standardization and certification of food and agricultural products; - testing laboratories, institutions for conducting food safety expertise; - institutions for quality control of raw materials and finished products; - trade inspection, sanitary and epidemiological supervision, state technical supervision; - consumer protection institutions, customs service, etc. - scientific research organizations, patent offices; - the sphere of education and science (higher education institutions, colleges).
Types of professional activities	Organizational and managerial: - management of the resources of the Food Conformity Assessment Body; - development and implementation of the latest progressive forms of management. Production and technological: - organization of work of all divisions of food industry enterprises on safety and conformity assessment of food products. Scientific research: - scientific research in the field of food safety. Pedagogical:

		- implementation of educational services in higher education institutions and colleges.
Object professional activity	of	food industry branches, food certification enterprises, research institutes, sanitary and epidemiological, organizational and managerial, educational institutions (universities, colleges)
Functions professional activity	of	- management of the resources of the Food Conformity Assessment Body; - carrying out work to confirm the conformity of food products; - analysis and evaluation of materials and products for conformity assessment; - carrying out declaration of conformity, application of declaration schemes; - ensuring the implementation of procedures for the accreditation of the Food Conformity Assessment Body; - implementation of academic, research, scientific, methodological and social activities in the OVPO; - socialization of learning youth.

3 Requirements for the content of the educational program

Name of cycles and disciplines	Workload in academic credits
Cycle of basic disciplines (BD)	35
University component	20
Component of choice	15
Cycle of major disciplines (MD)	53
University component	25
Component of choice	15
Research Practicum	13
Scientific Research Work of a Master's Student	24
The Scientific Research Work of a Master's Student, Including the Completion of an Internship and the Preparation of a Master's Thesis	24
Final certification (Preparation and Defense of a Master's Thesis (PDMT))	8
Preparation and Defense of a Master's Thesis	8
Total	120

4 Competency map of the educational program 7M07239 Technology of food products

Degree awarded	Master in the educational program 7M07239 Food Technology
Field of professional activity	- food industry branches; - scientific research organizations; - enterprises of various forms and types of ownership; - education and science (higher education institutions, colleges)
Types of professional activities	Organizational and managerial: - management of the activities of catering enterprises, meat, fish, dairy, canning industry, - development and implementation of the latest progressive forms of management; Production and technological: - organization of work of all divisions of food industry enterprises; Scientific research: - scientific research in the field of technology and food production Pedagogical: - implementation of educational services in the field of education and science (higher education institutions, colleges)
Object of professional activity	all branches of the food industry, research institutes, organizational and management institutions, universities, colleges
Functions of professional activity	- management of the production and economic activities of a food industry enterprise in accordance with the legislation; - development and implementation of the latest progressive forms of management; - organization of the company's production activities; - implementation of academic, research, scientific, methodological and social activities in the OVPO; - socialization of learning youth.
Degree awarded	Master in the educational program 7M07239 Food Technology
Field of professional activity	- food industry branches; - scientific research organizations; - enterprises of various forms and types of ownership; - education and science (higher education institutions, colleges)
Types of professional activities	Organizational and managerial: - management of the activities of catering enterprises, meat, fish, dairy, canning industry, - development and implementation of the latest progressive forms of management; Production and technological: - organization of work of all divisions of food industry enterprises; Scientific research: - scientific research in the field of technology and food production Pedagogical: - implementation of educational services in the field of education and science (higher education institutions, colleges)
Object of professional	all branches of the food industry, research institutes, organizational

Functions of professional activity	- management of the production and economic activities of a food industry enterprise in accordance with the legislation; - development and implementation of the latest progressive forms of management; - organization of the company's production activities; - implementation of academic, research, scientific, methodological and social activities in the OVPO; - socialization of learning youth.
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5 Learning outcomes of the educational program and modules

Key com-petencies	Learning Outcomes (LO) for the educational program	Name of module	Learning outcomes for the module	Name of disciplines that form learning outcomes
Behavioral skills and personality traits (Softskills)	LO 1 Uses modern methods and technologies of scientific and professional communication in a foreign language in the field of professional activity	The module of basic disciplines	Applies the techniques of logical analysis of scientific texts in a foreign language and demonstrates knowledge of modern methods and technologies of professional communication in a foreign language	Иностранный язык (профессиональный)
Professional skills (Hardskills)	LO 2 Explores a holistic, systematic scientific worldview using knowledge of the history and philosophy of science.	The module of basic disciplines	Demonstrates knowledge of the main stages of the formation and development of science and world philosophical thought; understanding the professional and social necessity of their own scientific work	History and philosophy of science
Behavioral skills and personality traits (Softskills)	LO 3 Applies knowledge of the methodological foundations of higher school pedagogy, professional knowledge and skills in the training and socialization of students	The module of basic disciplines	Carries out educational, scientific, methodological, scientific and educational activities at the university	Pedagogical practicum
Behavioral skills and personality traits (Softskills)	LO 4 Introduces psychological management mechanisms, teaching	The module of basic disciplines	Describes the content of psychological personality traits in the design of future professional activities. Demonstrates the ability to apply knowledge of psychology	Management psychology

	methods, and modern learning technologies into the educational process.		for the purpose of self-knowledge and the knowledge of others	
Professional skills (Hardskills)	LO 5 Uses quantitative and qualitative methods, modern equipment for scientific research in food production	Methodology of scientific research in the field of food industry	Formation of students' skills to apply quantitative and qualitative methods, as well as modern equipment for scientific research in the field of food production. The module examines the methods of analysis of raw materials and products, physico-chemical and biochemical processes occurring during the processing of food raw materials, as well as the basics of planning and conducting experiments with subsequent interpretation of the results.	Methods of research of food raw materials and products Physico-chemical and biochemical processes in food production Scientific research and organization of the experiment Scientific bases of food production
Professional skills (Hardskills)	LO 6 Evaluates the safety of food products and raw materials, as well as the content of contaminants, biological agents and chemicals in them	Modern trends in the food industry	The module develops students' skills in applying quantitative and qualitative methods and modern equipment to study the contamination factors of food raw materials and products, as well as evaluating the effectiveness of barrier technologies in ensuring food safety. The module examines the sources of microbiological and chemical contamination, methods for its detection and control, as well as scientific approaches to the development and implementation of barrier solutions aimed at preserving the quality and safety of food products at all stages of production..	Barrier technologies in food production Contamination of food raw materials and food products
Professional skills (Hardskills)	LO 7 Uses biotechnological methods and principles to evaluate and apply processes for the	Food technology	The module is aimed at developing students' competencies in the field of developing recommendations for the organization of technological and biotechnological processes in the production of functional,	Biotechnological methods for increasing the nutritional value of meat and dairy products Technology of functional and specialized food products

	production of functional food products, enzyme preparations, and their storage, taking into account regional standards (ISO, ESG), digital technologies, and quality management systems in agro-industrial production.		specialized and herodietic food products, as well as enzyme preparations. Modern approaches to the creation of products with specified properties, the selection of raw materials, the use of biotechnological methods, including fermentation and the use of probiotic cultures, are being studied. Special attention is paid to the scientific substantiation of formulations and technological regimes, taking into account the physiological needs of various population groups.	Biotechnologies in food production Technology of production of enzyme preparations Specialized food products of animal and vegetable origin продуктов Technology of food bioproducts Technology of herodietic nutrition products
Professional skills (Hardskills)	LO 8 Develops innovative food technologies based on scientific knowledge, best practices and prospects for the development of the food industry	Modern trends in the food industry	Formation of students' knowledge and skills necessary for the development and implementation of innovative technologies in the food industry. Modern methods and technical solutions for processing food raw materials, trends and prospects for the development of the industry, as well as examples of advanced domestic and foreign experience are considered. Special attention is paid to the application of scientific achievements and technological innovations to create competitive, safe and high-quality food products.	Innovative equipment and technologies in the food industry Innovative technologies for processing food raw materials
Professional skills (Hardskills)	LO 9 Implements the introduction of environmentally safe technologies for waste and secondary raw material processing using project management methods,	Food technology	The module is aimed at developing students' practical skills and theoretical knowledge in the field of product quality assurance and management, the development of new types of food products and effective recycling of waste and recycled materials. In the course of the study, modern technologies for the disposal and reuse of raw materials, methods for improving the economic and	Ensuring the quality of products of processing industries Product quality management Technology of waste and secondary raw materials processing New product development technology

	risk assessment, and efficiency evaluation.		environmental efficiency of production, as well as the stages of design and implementation of new products are considered. Special attention is paid to the development of innovative technological solutions that contribute to the expansion of the product range and the sustainable development of the food industry.	
Digital competencies (Digital skills)	LO 10 Analyzes the production and potential of meat and dairy products, technological processes using biotechnological methods for the production of food products of animal and vegetable raw materials and products of their processing.	Methodology of scientific research in the field of food industry	The module is aimed at developing students' skills in applying modern scientific research methods, digital technologies, including elements of artificial intelligence, and specialized equipment for solving technological problems in the food industry. The discipline examines the physico-chemical and biochemical foundations of food processes, innovative approaches to processing raw materials, methods of planning and conducting experiments, as well as the development and optimization of technological solutions using information systems. Special attention is paid to the integration of scientific knowledge and digital tools into the process of creating safe and efficient food production technologies.	Physico-chemical and biochemical processes in food production Innovative technologies for processing food raw materials Innovative equipment and technologies in the food industry Scientific research and organization of the experiment Scientific bases of food production
Professional skills (Hardskills)	LO 11 Analyzes the production and potential of meat and dairy products, technological processes using biotechnological methods for the production of food	Food technology	The module is aimed at developing students' competencies in the field of analysis and application of biotechnological methods to increase the nutritional value and sustainability of the production of products from animal and vegetable raw materials. Technologies of bioconversion, fermentation, the use of microbiological and enzyme preparations, as well as rational	Biotechnological methods for increasing the nutritional value of meat and dairy products Biotechnologies in food production Technology of waste and secondary raw materials processing

Professional skills (Hardskills)	products of animal and vegetable raw materials and products of their processing.		approaches to the processing of waste and secondary raw materials are being studied. Special attention is paid to assessing the production and technological potential of meat and dairy products and developing biotechnological solutions to improve the quality, safety and biological value of products.	
	LO12 Implements the management of production and economic activities of a food processing enterprise, ensuring product quality, introducing bioproduct technologies, and developing new production lines.	Food technology	The module is aimed at training specialists who are able to effectively organize and manage production processes in the food industry. The discipline examines modern approaches to ensuring and controlling product quality, technology for creating functional and herodietic products, features of food bio-products production, as well as methods for developing and introducing new types of products. Special attention is paid to the management of production and economic activities, technical and technological design of new production lines and optimization of technological processes, taking into account modern requirements and industry trends.	Ensuring the quality of products of processing industries Product quality management Technology of food bioproducts Technology of herodietic nutrition products New product development technology

6 The relationship between the attainability of the formed learning outcomes according to the educational program and academic disciplines

No	Name of the discipline	Brief description of the discipline	Number of credits	Formed learning outcomes (codes)
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			LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7	LO 8	LO 9	LO 10	LO 11	LO 12
Цикл базовых дисциплин														
Вузовский компонент/ Компонент по выбору														
1	Foreign language (professional)	The discipline is aimed at developing academic interaction and scientific writing skills. While studying the subject, the master's student systematizes foreign information in their field of expertise and conducts professional activities in a foreign language. This enables the effective presentation of original research results in an international environment, the preparation of articles for high-ranking journals, and the delivery of lectures on specialized subjects, thereby enhancing the overall competitiveness of the future researcher.	4	+										
2	History and philosophy of science	The discipline aims to cultivate a culture of scientific thinking and develop methodological analysis skills. The learning process focuses on a profound understanding of the specifics of cognition, ensuring the high-quality completion of the master's thesis and the achievement of a high level of academic integrity in preparing scientific publications. Throughout the course, the master's student analyzes the theoretical problems of modern science and substantiates the methodological framework of their own scientific research.	4	+										

[illegible]

[illegible]

[illegible]

[illegible]

	finished products and the development of new products		
LO 10	It uses modern research methods, information technologies, artificial intelligence and equipment for scientific research and development of technological processes in food production	Multi-level tasks and assignments	Solving situational problems
LO 11	Analyzes the production and technological potential of meat and dairy products, technological processes using biotechnological methods for the production of food products of animal and vegetable raw materials and products of their processing	Analysis cases	Solving situational problems
LO 12	He is able to manage the production and economic activities of a food industry enterprise, manage production and design new lines of the food industry	Brainstorming	Protection of computational and graphical work

8 Correlation of learning outcomes of the educational program with the labor functions of professional standards (if any)

Name of the professional standards used	Professions at level 6 and/or 7 of the SQF	Labor functions	Tasks	Learning outcomes for the educational program
Professional standard: "Production of meat and meat products"	General manager	LF 1. Manage production and economic activities	Task 1. Implementation of enterprise management Task 2. Maintaining a set of measures to control the company's divisions	LO 12 He is able to manage the production and economic activities of a food industry enterprise, manage production and design new lines of the food industry
Professional standard: Teacher (faculty) of higher education and (or) postgraduate education	Teacher, assistant in the field of higher education, OVPO	LF 1. Training LF 2. Conducting scientific research; LF 3. Carrying out scientific and methodological work; LF 4. Socialization of learning youth	Task 1. Ensuring the required level of academic competencies of students Task 2. Ensuring the integration of science, higher education and the labor market Task 3. Scientific and methodological support of macro-processes of OVPO	LO 3 Applies knowledge of the methodological foundations of higher school pedagogy, professional knowledge and skills in the training and socialization of students

9. Graduate Model

GRADUATE MODEL			
Production of public catering products from 12/27/2019 and updated from 2025 by order of the Minister of Agriculture of the Republic of Kazakhstan dated December 19, 2025 No. 477 (Director of the enterprise); 2 Teacher (faculty) of higher and (or) postgraduate education organizations in accordance with the Approved Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated November 20, 2023 No. 591.	Competencies (soft skills, digital skills)		
	Attributes graduate	Knowledge	Skills
	1. Creativity and solution 2. Teamwork, leadership 3. Digital professional competence 4. High professionalism in the food industry	Knowledge in the field of HACCP , ISO 22000 , GMP - as food safety management systems. GOSTs and SanPiNs concerning the safety and quality of products. The procedure for certification and declaration of food products. Methods of product identification (visual, documentary, laboratory). Principles of traceability at all stages of production and sales of products.	1. Applies the regulatory framework in the field of food product conformity assessment 2. Interacts effectively with certification bodies and colleagues 3. Ability to quickly resolve problems at all stages of production. 4. Prepares and prepares documents for conformity assessment 5. Conducts quality control and food safety at every stage: from production to transportation
	Professional skills (hard skills)		
	Applies regulatory documentation when conducting product conformity assessment. Proficient in sampling methods, identification and interpretation of laboratory test results. Able to prepare and analyze documents based on the results of conformity assessment (protocols, certificates, declarations, conclusions, etc.). Understands the structure of quality management systems and the principles of HACCP , ISO 22000.		
Atlas of new professions and competencies (Order of the Minister of Agriculture of the Republic of Kazakhstan dated	Attributes graduate	Knowledge	Skills
	1. Leadership 2. Creativity 3. Communication skills	Ethics of research and teaching. Fundamentals of pedagogical innovation and	Develops and implements innovative educational programs and courses. Creates unique materials and approaches for

GRADUATE MODEL

	4. Academic integrity 5. Openness to innovation 6. Reflexivity 7. Digital literacy	development of original educational programs. Principles of a creative approach in teaching. Fundamentals of scientific methodology of the strategy for assessing educational results. Modern information and communication technologies in education. Organization and control of educational processes.	teaching. Uses game-based and creative methods in teaching. Analyzes students' learning outcomes and identifies problem areas in learning. Evaluates the effectiveness of educational technologies and methods. Uses digital educational platforms to conduct classes and testing, and has the ability to work with various IT tools to create educational materials and manage training
Professional skills (hard skills)			
Development of educational programs and courses with innovative approaches. Application of new educational technologies and methods. Implementation of the latest achievements in scientific research into the educational process. Application of pedagogical reflection methods (analysis of teaching activities, feedback from colleagues and students). Evaluation of one's own teaching results and improvement of teaching methods. Organization and management of scientific projects and working groups. Participation in the management of educational and scientific processes at the faculty.			

Модуль № 1

Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	4 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	120	0	4	1	6	180	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	6 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	180	0	6	2	6	180	0	5	3	180	135	0	57	558	5 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	5 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	150	0	5	3	5	150	0	5	3	150	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	9 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	270	0	9	4	9	270	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Барлығы модуль бойынша / Итого по модулю / Total for module																						
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	2 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	120	0	4	1	6	180	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
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Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	9 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	270	0	9	4	9	270	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Барлығы модуль бойынша / Итого по модулю / Total for module																						
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	2 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	120	0	4	1	6	180	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	6 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	180	0	6	2	6	180	0	5	3	180	135	0	57	558	5 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
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Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	5 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	150	0	5	3	5	150	0	5	3	150	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	9 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	270	0	9	4	9	270	0	5	3	180	135	0	57	558	9 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
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Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	6 апта / неделя / weeks	Барлық кафедралар Все кафедры All chairs	180	0	6	2	6	180	0	5	3	180	135	0	57	558	5 апта / неделя / weeks	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs	Бағам Другое More
Бағам Другое More	Ғылыми-зерттеу жұмысы Исследовательская работа Research work	Барлық кафедралар Все кафедры All chairs</																				

Барлығы модуль бойынша / Итого по модулю / Total for module									
Модуль / Module № 6	Жаңа өнімдерді әзірлеу технологиясы Technology for development of new products New Product Development Technology	TRNP 6312-26 TRNP 6312-26	3	5	150	45	30	15	15
	Өсімдік және жануарлық маддылардан тағам өнімдері Food and animal products from plant and animal products	БЕП (ТК) ПД (КБ) ПД (ЕК)							
	2. Специализированные пищевые продукты животного и растительного происхождения Specialized Food Products of Animal and Vegetable Origin	SPPZRP 6312-26 SPPZRP 6312-26							
Барлығы модуль бойынша / Итого по модулю / Total for module									
/ /									
Модуль / Module № 7	Тамақ шикізаттарын өңдеудің инновациялық технологиялары Innovative technologies for processing of food raw materials	IPRPS 6314-26 IPRPS 6314-26	3	5	150	45	30	15	15
	Тамақ өндірісі саласындағы инновациялық техника мен технологиялар Innovative equipment and technologies in the food industry	БЕП (ТК) ПД (КБ) ПД (ЕК)							
	2. Пищевая отрасль Food Industry	IPTRPO 6314-26 IPTRPO 6314-26							
Барлығы модуль бойынша / Итого по модулю / Total for module									
/ /									
Модуль / Module № 8	Тағам өнімдерін сақтау биотехнологиясы Biotechnology of food storage	BKAPR 6315-26 BKAPR 6315-26	3	5	150	45	30	15	15
	Қалдықтарды және қайталама шикізатты қайта өңдеу технологиясы Technology for processing of waste and secondary raw materials	БЕП (ТК) ПД (КБ) ПД (ЕК)							
	2. Технология переработки отходов и вторичного сырья Technology of Waste and Secondary Raw Materials Processing	TPOVS 6315-26 TPOVS 6315-26							
Барлығы модуль бойынша / Итого по модулю / Total for module									
/ /									
Модуль / Module № 9	Тамақ шикізаты мен тамақ өнімдерінің контаминациясы Contamination of food raw materials and food products	KPSPP 6316-26 KPSPP 6316-26	3	5	150	45	30	15	15
	Тағамдық биомодер технологиясы Technology of food bioproducts	БЕП (ТК) ПД (КБ) ПД (ЕК)							
	2. Технология пищевых биопродуктов Technology of Food Bioproducts	TPB 6313-26 TPB 6313-26							
Барлығы модуль бойынша / Итого по модулю / Total for module									
/ /									
Қорытынды аттестация / Итоговая аттестация / Final assessment									
Модуль / Module № 10	Қорытынды аттестаттар (Магистратуралық диссертацияны ресімдеу және қорғау) (МДРҚ) Итоговая аттестация (Оформление и защита магистерской диссертации) (О/ЗМ/П, Email assessment /Dissertation and		4	8	240				
	Барлығы модуль бойынша / Итого по модулю / Total for module	Барлығы модуль бойынша / Итого по модулю / Total for module							
Барлығы модуль бойынша / Итого по модулю / Total for module									
8 240 0 0 0 0 0 0 0 0									
120 3450 630 390 240 0 162 1188									

**International Academic Advisor Confirmation/ Шетелдік кеңесшінің қатысуы/
Участие зарубежного консультанта**

Educational Program/ Білім беру бағдарламасы/ Образовательная программа	7M07239 Technology of Food Products 7M07239 Азық-түлік өнімдерінің технологиясы 7M07239 Технология продовольственных продуктов
Level/ Дәрежесі/ Уровень	Master's Магистр Магистр
International Academic Advisor/ Шетелдік академиялық кеңесші/ Зарубежный консультант	Djakhangirova Gulnoza Zinatullaevna Джахангирова Гулноза Зинатуллаевна Джахангирова Гулноза Зинатуллаевна
Academic degree/ Ғылыми дәреже/ Ученая степень	PhD Философия докторы (PhD) Доктор философии (PhD)
Position/ Лауазымы/ Должность	Professor, Department of Technology of Food and Perfumery-Cosmetic Products) Тамақ және парфюмерлік-косметикалық өнімдер технологиясы кафедрасының профессоры проф. Кафедры Технология пищевых и парфюмерно- косметических продуктов
Организация/ Ұйым / Organization	Tashkent Chemical-Technological Institute Ташкент химия-технологиялық институты Ташкентский химико-технологический институт
Country/ Ел/ Страна	Republic of Uzbekistan, Tashkent Өзбекстан Республикасы, Ташкент қаласы Республика Узбекистан, г. Ташкент

Approved/ Келісілді/ Согласовано

The educational program has been reviewed and approved. The updated content of the educational program, the sequence of courses, and the revised learning outcomes (LO) have been developed in accordance with modern academic approaches.

Білім беру бағдарламасы қарастырылып, келісілді. Білім беру бағдарламасының жаңартылған мазмұны, пәндерді оқу реттілігі және жаңартылған оқу нәтижелері (ОН) заманауи академиялық тәсілдерге сәйкес әзірленді.

Образовательная программа рассмотрена и согласована. Актуализированное содержание образовательной программы, последовательность изучения дисциплин и обновленные результаты обучения (РО) сформированы с учетом современных академических подходов.

International Academic Advisor/
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Қолы/
Подпись)

(Date/
Күні/
Дата)

Seal/ MO/ М.П.



EXPERT OPINION

for the educational program 7M07239 "Technology of food products (by industry) (scientific and pedagogical direction)

in the field of training M111 Food production

Name of the organization of the partner company for the development of the educational program: Astana branch of LTD Kazakh Research Institute of Processing and Food Industry

The educational program 7M07239 "Technology of food products (by industry) (scientific and pedagogical direction) is aimed at training qualified specialists with competencies in the field of development, organization and control of technological processes of food production. The program meets the urgent needs of the agro-industrial complex, the food and processing industry, ensuring the graduation of highly qualified personnel.

The content of the program fully corresponds to the National Qualification Framework, the industry qualification framework and professional standards used in the OP - "Production of meat and meat products", "Teacher (faculty) of higher and (or) postgraduate education". Compulsory disciplines are included in the OP, as well as a variable part that ensures the individualization of educational modules.

The subjects studied are focused on the formation of competencies that are in demand in modern production conditions, including knowledge of functional and specialized food technology, innovative approaches to the development of formulations and technologies, product quality management, and others.

The program pays special attention to practical training. The educational process includes teaching and research practices, scientific internships and research activities in cooperation with partner enterprises. This contributes to the formation of professional skills among undergraduates and preparation for the scientific and industrial environment.

The educational program 7M07239 "Technology of food products (by industry) (scientific and pedagogical direction) meets the current requirements of the State Educational Standard and professional standards, is focused on training competitive specialists in the field of the food industry and is recommended for implementation in the stated format.

The reviewed educational program 7M07239 "Technology of food products (by industry) (scientific and pedagogical direction) provides comprehensive training for specialists with modern professional competencies necessary for successful activities in the field of food production and development.

It is recommended to continue developing practice-oriented modules, expand partnerships with the industry, and strengthen the participation of undergraduates in international scientific and educational projects.

Expert
Acting Director
Astana branch
LTD "Kazakh Research
Institute of processing
and Food Industry"



Alzhaksina N.E.

Expert opinion

for the educational program 7M07239 Food Technology (by industry)

in the field of training M111 Food production

Name of the organization of the partner company for the development of the educational program: "SPE Innovator" LLP

The educational program "7M07239 Technology of food products (by industry)" has been developed in accordance with the State Mandatory Standard of Higher Education, approved by the order of the Ministry of Education and Science of the Republic of Kazakhstan and complies with regulatory legal acts regulating the professional activities of the NRC, ORC and labor functions.

The educational program "7M07239 Food technology (by industry)" corresponds to the current level of development of the food and processing industries, spheres of social activity, the level and achievements of modern science and technology, as well as the requests and needs of employers in the field of food and processing industries.

The disciplines contained in the educational programs provide an opportunity for in-depth study and acquisition of knowledge in the field of food technology. According to the structure of the EP, they are built on a modular principle based on a competency-based approach, and are logically designed. In terms of their content, the EP disciplines are relevant, structured, and the generalized work functions of graduates are presented in accordance with professional standards. The conditions for the implementation of the educational program, the personnel conditions for the implementation, the logistical and educational conditions meet the requirements.

According to the EP, students are recommended to study the following disciplines "Technology of new products", therefore, we recommend that they be included in the catalog of elective subjects.

Based on the above, I believe that this EP is relevant, their content corresponds to the priority area in the field of food technology. The educational program "7M07239 Food Technology (by industry)" meets the requirements.

The expert

Director of "SPE Innovator"



Iskakova D.M.