



NJSC SHAKARIM UNIVERSITY OF SEMEY

DEVELOPMENT PLAN EDUCATIONAL PROGRAM

8D07202 - Food Safety

Semey

Content

№	Name of sections	Pages
1.	Passport of the educational program development plan	3
2.	Analytical justification of the EP	4
2.1	Information about the educational program	4
2.2	Information about students	5
2.3	Internal and external conditions of EP development	5
2.4	Information about teaching staff implementing the educational program	6
2.5	Characteristics of the achievement of the EP	7
3	The main objectives of the EP development plan	9
4	EP risk analysis	9
5	Action plan for the development of the EP	10

1. Passport of the Development Plan of OP 8D07202 - Food safety in the field of training 8D072 - Manufacturing and processing industries on the basis of the State Higher and postgraduate education of the Republic of Kazakhstan dated 20.07.2022.

(name of the OP)

1	The basis for the development	Strategic Plan of Shakarim University for 2021-2025 Faculty work plan
2	Developed by the Academic Committee of the OP	Head of AK: Nurymkhan G.N. – Dean of the Faculty of Engineering and Technology EP Manager: Asanova Bakytgul Kazhkenovna, Candidate of Technical Sciences, Professor AK members: Smolnikova Farida Kharisovna, Associate Professor, Kasymov Samat Kairatovich, Associate Professor, Zhumanova Gulnara Tokenovna, PhD, Employer: Zharykbasova Klara Sauykovna, Doctor of Technical Sciences, Vice-Rector for Educational and Methodological Work of the Kazakh Humanitarian and Legal Innovation University <i>(in accordance with Order No. 99 of 29.03.2023)</i>
3	Terms of implementation	2023-2025 гг.
4	Expected results of implementation	Training of competitive scientific and pedagogical personnel who possess modern methods and means of research and are able to 1. to use innovative modern technologies in professional activity, to comply with the principles of the food quality assessment system and food safety; 2. critically analyze and experimentally evaluate the content and specific features of the food safety quality assessment system in accordance with current standards, as well as the principles of HACCP and environmental safety.

2. Analytical justification of the EP

2.1 Information about the educational program

The educational program has been developed in accordance with the National Qualifications Framework and Professional Standards, according to the Dublin Descriptors and the European Qualifications Framework. A typical period of mastering an educational program is 3 years.

EP «8D07202 - Food safety» was developed by the Academic Committee
code and name of the OP

Considered at the meeting of the Quality Assurance Commission of the Faculty of Engineering and Technology (Protocol №4/6 of 10.04.2023

Approved at the meeting of the Academic Council of the University (Protocol №8 of 25.04.2023.)

The main criterion for the completion of the educational process is the development of at least 180 credits, with the award of the degree of Doctor of Philosophy (PhD) in the educational program 8D07202 - Food safety

The main criterion for the completion of the educational process for the preparation of 8D07202 - «Food safety» is the development of at least 45 credits of theoretical training, including at least 10 credits of pedagogical practice, 10 credits of research practice, 123 credits of research work (other types of educational / scientific work), at least 12 credits for writing and defense of a doctoral dissertation. A total of 180 credits.

Typical training period: 3 years.

DB cycle (VC, KV) – 25 credits

PD cycle (VC, KV)- 20 credit

NIRD 123 credits

Final certification of 12 credits

The uniqueness of the doctoral program 8D07202 - Food safety is the traditionally formed system of training highly qualified and competitive in the domestic and international labor market scientific and pedagogical personnel with professional and scientific competencies and skills of their implementation in practical and scientific activities. As well as the presence of a dissertation council in the specialty 8D07202 - Food safety since 2016.

The advantage of this educational program is the availability of sufficient material and technical base, highly qualified teaching staff with sufficient scientific and pedagogical experience, high degree of teaching staff. The EP development plan is implemented in accordance with the strategic development of the University and the main national priorities for the development of science and technology.

2.2 Information about doctoral students

Academic year The basis of training	2023-2024 academic year	2024-2025 academic year	2025-2026 academic year
Grant	2	1	2
Contract	-	-	-
Total	2	1	2

2.3 Internal and external conditions for the development of OP

For the development and implementation of the educational program 8D07202 - Food safety, the department has created favorable and optimal conditions such as:

modern educational and scientific laboratories, technical training facilities. Doctoral students also use the material and technical base of the departments of faculties, the Scientific Center for Radioecological Research and the Scientific Center «Agrotechnopark».

The department has 8 lecture halls (214, 301, 306, 308, 310, 314, 318) and 10 laboratories (205, 206, 207, 208, 215, 305, 307, 309, 311). Lecture halls are equipped with interactive whiteboards and monitors, laboratories with modern instruments and equipment.

Laboratory classes and scientific research of students are conducted in the educational laboratories "Food Technology", «Food examination», «Food safety», «Laboratory of food Biotechnology», «Laboratory of biological products».

The equipment of educational laboratories meets the safety requirements: laboratory passports, safety instructions, a safety magazine, primary fire extinguishing means are available. The level of equipment with modern equipment of educational and laboratory facilities is quite high, which fully corresponds to the goals and objectives of training specialists.

On the basis of the contract, a branch of the department operates on the basis of the SF LLP «Kazakh Research Institute of Processing and Food Industry».

The teaching staff of the department have personal computers and free Internet access.

2.4 Information about teaching staff implementing the educational program

Teaching staff for students includes teachers with academic degrees. The teaching staff of this EP meets the qualification requirements for licensing educational activities and has full knowledge, owns modern teaching methods, which allows you to organize an effective educational process. Consequently, the teaching staff ensures the full quality of the educational program.

The implementation of the educational program 8D07202 -«Food safety» at the department is carried out by 9 teachers, including 2 professors, 7 associate professors. The degree of the department is 100%.

Recruitment and distribution of responsibilities is carried out in accordance with the qualification requirements put forward to the teaching staff by the legislative acts of the Republic of Kazakhstan. Certification of full-time teaching staff is carried out annually at the meetings of the commission.

The University by all means of teaching staff provides all the necessary conditions for high-quality work in a professional environment. Thus, sociological surveys are conducted annually to help identify urgent problems and find ways to solve them.

Professional and personal development of the teaching staff, independent professional development, acquisition of knowledge on the taught course of disciplines implementing the EP is stimulated by the following types of incentives and allowances to the official salary of employees: for teaching in English; for internships or studying abroad; for the quality of scientific results; for performing administrative functions; according to the results of a rating system for evaluating the activity of a teacher.

The competence of the teaching staff determines the achievement of high results in fulfilling the mission, increasing the prestige of the university, its competitiveness. The teaching staff of EP 8D07202- "Food safety" has the necessary set of competencies necessary to assess the knowledge of students. The teaching staff of the department meet the qualification requirements declared to the employees of the university. New competencies of teaching staff are acquired through advanced training courses, internships. During the advanced training, professional and pedagogical skills, communication skills, ICT skills,

additional competence, etc. are acquired. For this purpose, the university also conducts intra-university advanced training courses, for example, in the summer of 2023, advanced training courses "Management in education. Development of author's programs", as well as annually, according to the general university plan, teaching staff who need to improve their professional skills are sent to courses.

№	Indicators	Ед.изм.	2023-2024 academic year	2024-2025 academic year	2025-2026 academic year
1	The share of teaching staff with an academic degree in EP	%	100%	100%	100%

2.5 Characteristics of the achievements of the EP

The achievements of EP 8D07202-Food safety include systematic training of scientific and pedagogical personnel and the defense of doctoral dissertations:

In November 2022, 2 dissertations on EP "Food Safety" were defended at the meetings of the dissertation Council:

- dissertation work of Zhumanova Gulnara Tokenovna on the topic: "Technology development and quality assessment of processed semi-finished horsemeat using protein fortifiers". Scientific consultant – Ph.D., Professor B.K. Asenova.

- dissertation work of Utigenova Asia Orazbekovna on the topic "Development of biometric methods for determining xenobiotics in milk". Scientific consultant – Ph.D., associate professor. Z.H. Kakimova.

A postdoctoral grant was won by Baykadamova Asemgul Madeniyetovna AR14973033 on the topic: "Ensuring the food safety of meat products of smeared consistency using meat and bone paste" in the specialty 8D07202 — "Food safety". Scientific supervisor - Doctor of Technical Sciences, Professor Kakimov A.K.

Almost all doctoral students have published scientific articles in peer-reviewed journals of the Scopus database and Web of Science, in journals from the List of the Committee for Quality Assurance in the Field of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan of the Ministry of Internal Affairs of the Republic of Kazakhstan and utility model patents.

The achievements of the EP also include the functioning on the basis of a contract of a branch of the department on the basis of the SF LLP "Kazakh Research Institute of Processing and Food Industry", where doctoral students conduct research and testing of the developed technologies.

3. Main objectives of the EP development plan

One of the requirements for the development plans of the University is their compliance with the mission, strategic goals and objectives of the university, the presence of a section on improving activities.

The analysis showed that the implementation of educational programs is carried out in accordance with the mission, development strategy of the university, vision and values of the organization of education.

The development plan and goals of the EP are developed in accordance with the educational policy of the Republic of Kazakhstan and the Academic Policy of the University. The tasks implemented within the framework of the EP are aimed at developing competencies and practical skills necessary for successful work in the chosen field of activity, possession of basic subject-specialized knowledge and personal qualities that contribute to his social mobility and stability in the labor market.

The main objectives of the EP development plan:

1. Training of scientific and pedagogical personnel that meet the requirements of the modern labor market.
2. Interaction of the university with employers, with leading research centers and universities for quality internship of doctoral students
3. Graduation of competitive specialists with knowledge of a professional foreign language and digital technology.
4. Improving the material and technical base and research potential of EP 8D07201-Food technology.

4. Risk analysis of EP

1. Reduction of the contingent of doctoral students.
2. Insufficient level of academic mobility of students and teaching staff.
3. Insufficient number of teachers who speak foreign languages.
4. Moral and material deterioration of scientific instruments and installations for research
5. Insufficient number of scientific publications of teaching staff in peer-reviewed foreign journals.
6. Low level of proficiency in foreign languages of applicants entering doctoral studies.

№	Name of risks	Measures to eliminate
1	Reduction of the contingent of students in the EP	Strengthening career guidance
2	Insufficient level of language knowledge for the introduction of trilingual education	Creating conditions for enhanced language training of teaching staff, by mandatory attendance of foreign language courses. Organization of foreign language courses for the preparation of applicants
3	Decrease in the level of employment	Targeted distribution of doctoral students
4	Insufficient development of external and internal academic mobility of students and teaching staff	Conclusion of agreements and memoranda with leading universities of the Republic of Kazakhstan, near and far abroad
5	The risk of a decrease in the settlement of the PTS by EP	Timely defense of dissertations by doctoral students and systematic work of the dissertation council

5. Action plan for the development of EP

№	Criteria	Expected Results	Unit of measurement.	2023-	2024-	2025-
				2024	2025	2026
Direction 1. Educational and methodological support						

1.1	Updating the educational program based on professional standards, taking into account the recommendations of employers	Conducting an examination of the Educational program 8D07202 - «Food safety» in order to increase the practice orientation and development of professional competencies of graduates	actual	-	-	1
1.2	Monitoring and updating catalogs of elective disciplines in accordance with the development of key and professional competencies, the demands of the labor market	Improving the quality of the content of educational programs by including elective courses aimed at developing key and professional competencies of graduates in accordance with the demands of the labor market.	actual	-	-	1
1.3	Introduction of modern learning technologies into the educational process, contributing to the development of cognitive activity, communicative ability of students	Improving the quality of teaching academic disciplines, taking into account the novelty and variety of forms of work that contribute to the development of cognitive activity.	actual		1	1
1.3.1	Introduction of mass open online courses (MOOCs) in the educational process according to the educational program	Introduction of disciplines into the educational process improving the quality of teaching academic disciplines, taking into account the novelty and diversity of forms of work that contribute to the development of cognitive activity.	Unit	-	-	-

1.4	Involvement of social partners and employers in the development, examination of the implementation of educational programs	Improving the quality of educational programs implemented taking into account market demands and recommendations of employers	Unit	-	-	1
1.5	Development and implementation of elective courses in English	Introduction of disciplines in English into the educational process	Unit	-	-	1
1.6	Conducting seminars and round tables on the application of innovative technologies in the educational process	Introduction of innovative technologies in the educational process	Unit	-	1	1
1.7	Publication of educational, methodical and scientific literature on the implemented EP	Improvement of educational and methodological support in the	Unit		1	1
1.8	Conclusion of contracts with foreign and domestic partner universities in order to develop academic exchange of students of all levels and teaching staff	Introduction of disciplines in English into the educational process	Unit		1	1
1.9	Inviting students from partner universities to study for a semester, short-term internships, internships, etc.	Development of international recognition of educational programs, implementation of academic mobility programs for students	Person		1	1

1.10	Participation of teaching staff and students in international academic exchange programs	Development of international cooperation with foreign universities implementing educational programs in the field of Food safety	Person	-	1	1
1.11	Development of outgoing academic mobility of teaching staff and students in the direction of	Introduction of innovative technologies in the educational process	Person	-	-	1
Direction 2. Teaching staff						
2.1	Professional development and training of scientific and pedagogical personnel for the implementation of educational programs once every 5 years	The share of teaching staff who have passed advanced training at the national level is at least 20%	Person	1	2	2
2.2	Advanced training, retraining, internships of teaching staff at the international level	Completion of at least 2 teachers of the advanced training program, retraining, internships of teaching staff at the international level	Person		-	2
2.3	Promotion of publications of the works of teaching staff in international publications indexed by the Web of Science and Scopus databases	An increase in the share of teaching staff who have published the results of scientific research in publications indexed by the Web of Science and Scopus databases – at least 30% of the total number of teaching staff	%	30	35	40
2.4	Involvement of practical specialists in teaching and scientific activities	Participation in the implementation of educational programs of practitioners (at least 20% of specialists)	%	20	20	20

Direction 3. Internationalization of educational programs

3.1	Conclusion of agreements on international cooperation with foreign universities	Implementation of joint projects, preparation of scientific publications with foreign partners, creation of bases for scientific internships of students	Unit		1	2
3.2	Attracting foreign students to study under the educational program "Food safety"	Increasing the number of foreign students	Person	-	-	-
3.3	Organization of joint scientific and practical events with international partners	Improving the efficiency of scientific and methodological activities of teaching staff, exchange of experience with foreign partners	Unit	-	1	1
3.4	Invitation of foreign specialists to give lectures and consultations on master's projects and dissertations	Improvement of the content component of educational programs based on the introduction of the experience of foreign specialists in the implementation of educational programs	Unit	-	-	1
3.5	Expansion of cooperation with Leading foreign scientific and educational organizations in order to attract the most qualified foreign specialists to the implementation of educational programs	Formation of key and professional competencies in accordance with the practice of leading universities	Person	-	-	1

Direction 4. Logistics and digitalization						
4.1	Step-by-step equipping of classrooms with technical training tools (projectors, panels, interactive and multimedia whiteboards, multifunctional devices, webcam, projector screen, etc.)	Equipping classrooms assigned to the department with technical training tools (projectors, panels, interactive and multimedia boards, multifunctional devices, webcam, projector screen, etc.)	Unit	-	1	1
4.2	Automation of the educational process (testing, session management, student contingent movement, dean's office, department, teaching staff load, schedule, library, syllabuses)	Information management based on the automation of the educational process (testing, session management, student contingent movement, dean's office, department, teaching staff load, schedule, library, syllabuses)	actual		1	1
4.3	Replenishment of the full-text database of research results of teaching staff and students, teaching staff (articles, monographs, etc.)	Increase in the number of results of scientific works of scientists, research of teaching staff and students, teaching staff (articles, monographs, etc.)	Unit		1	1
4.4	Expansion of the fund of scientific and educational literature, including on electronic media for implemented educational programs	Ensuring the implementation of educational programs based on modern educational and information resources, including on electronic media	%	-	20	25
4.5	Monitoring the content and improvement of the faculty's website	Formation of the faculty's website on various aspects of the implementation of educational programs.	%		100	100

Head of the department Kakimova Z.H.



REVIEWED

at the meeting of the Quality Assurance Commission

Chairman of the Commission  G.B. Abdulova

Protocol № 5
of «25» 05 2023 y.

AGREED
Dean of the Faculty

«25» 05 2023 y.

