

Ministry of Agriculture of the Republic of Kazakhstan  
Saken Seifullin Kazakh Agrotechnical University

Considered  
at a meeting of the Academic Council of  
the University  
Protocol №. 19  
«31» 08 2022

APPROVED  
Chairman of the Board  
"S. Seifullin Kazakh Agrotechnical  
University" JSC



«31» 08 2022

**EDUCATIONAL PROGRAM**  
**7M04102 «SARUD Sustainable Agriculture and Rural Development»**

Code and classification of the field of education:

7M04 Business, administration and law

Code and classification of areas of study:

7M041 Business and administration

Code in the international standard classification of education: 410

Awarded degree/qualification: Master of economic sciences in the educational  
program 7M04102 «SARUD Sustainable Agriculture and Rural Development»

Studying period: 2

Nur-Sultan 2022



## Content

№	Component name	Page
1.	Passport of the educational program	4
2.	General characteristics of the educational program	5
3.	Competence model (portrait) of a graduate	6
4.	Base of professional practice	8
5.	The structure of the educational program	10
6.	Annex 1. Academic calendar	12
7.	Annex 2. Working curriculum	14
8.	The relationship between the attainability of the formed learning outcomes in the educational program and academic disciplines	15

## **1. Passport of the educational program**

The educational program 7M04102 "SARUD Sustainable Agriculture and Rural Development" responds to the need for practice-oriented education in the field of sustainable agriculture and rural development, and also reflects the need to develop, implement and administer programs for integrated and sustainable rural development.

The main goal of the development of rural areas is to ensure the income of residents in these regions. This means maintaining the resource potential of primary producers of goods and services as a necessary basis for income diversification through the optimization of value chains based on the sustainable use of resources.

Sustainable agriculture produces products using resources efficiently and preserving the natural potential of ecosystems. Agricultural production systems need to be assessed in terms of how they meet the requirements for the use of natural resources, as well as how they contribute to the socio-economic environment.

**1.1 The purpose of the educational program:** The main goal of the educational program is to prepare masters who have the knowledge necessary for professional work on the principles of sustainable agriculture, the features of the development of rural areas, who are able to analyze the factors and conditions of sustainable development, as well as apply various tools for making management decisions and developing strategies for the sustainable development of business entities and rural communities.

### **Objectives of the educational program:**

- training of highly qualified specialists with professional competencies in the field of economics and organization in the agro-industrial complex;
- training of scientific and pedagogical personnel capable of applying modern methods of research and teaching, the necessary digital technologies in practice;
- training of specialists capable of analyzing and modeling business processes for making strategic decisions by enterprises;
- training of personnel with the necessary knowledge for the development and implementation of innovative and investment projects;
- training of specialists capable of independently organizing research, developing recommendations and proposals aimed at solving the problems of agribusiness, improving the economic policy of the state.

## 1.2 Learning Outcomes

LO 1. Possess the methodology of statistics for use in the study of socio-economic processes at various hierarchical levels.

LO 2. Have the ability to carry out an economic assessment of the state and prospects for the development of agriculture, ecology and the social sphere of rural areas, apply methods of involving the population in their development, apply methods for evaluating investment projects in economic/environmental/social aspects.

LO 3. Demonstrate the ability to develop strategies for the development of agri-eco-tourism activities at the regional level and relevant project levels.

LO 4. Possess the skills to assess the economic, environmental and social aspects of the sustainable state of agriculture and rural development.

LO 5. Demonstrate the ability to collect and interpret meaningful data in the field of sustainable agriculture technology, creative approach to problem solving and production situations.

LO 6. Possess knowledge in the field of economic and social foundations of rural development and their impact on the sustainability of agriculture; in the development of regional programs for the diversification and economic development of rural areas and their sustainability.

LO 7. Possess knowledge and understanding of the main trends in the field of current problems in the management of biological resources in rural areas; apply knowledge to summarize the results of experimental research and analytical work in the form of a dissertation, article, report, etc.

LO 8. Have the ability to manage economic services and departments at enterprises and organizations of various forms of ownership, in local government bodies; the ability to develop options for management decisions and justify their choice based on the criteria of socio-economic efficiency.

LO 9. Demonstrate the ability to lead a team in the field of their professional activity, tolerantly perceiving social, ethical, confessional, cultural and linguistic skills for working in the international market.

LO 10. Possess the skills of pedagogical skills, the art of presentation, independent analysis of the state, problems in the enterprise and the application of the acquired knowledge in practice, the development of critical thinking.

LO 11. Analyze the concepts of world and Kazakhstani economic science, apply knowledge of a foreign language to analyze foreign sources of information.

LO 12. Demonstrate the ability to analyze management systems, as well as factors influencing the performance of the organization and its functional units, psychological aspects of management.

LO 13. Analyze information and choose methods of scientific research to identify problems at various levels of the economy in general and at AIC enterprises in particular, suggest ways to solve them, taking into account the operation of economic laws.

LO 14. Apply new technologies in animal husbandry, explore the possibilities of their use and implementation on a particular farm.

## 2. General characteristics of the educational program

The main objectives of the educational master's program is to provide conditions for:

- obtaining a full-fledged, high-quality specialized education, professional competence in the field of economics, management and organization of production;
- acquisition of a high general intellectual level of development, mastery of literate and developed speech, humanitarian culture, high moral, ethical and legal standards, culture of thinking and skills of scientific organization of labor;
- development of creative potential, initiative, innovation and competitiveness of masters in the labor market, providing an opportunity for the fastest possible employment in the specialty;
- selection by undergraduates of individual education programs and provision of targeted training on the orders of organizations;
- deepening the theoretical, practical and individual training of students in the chosen direction;
- developing in students the ability for self-improvement and self-development, the needs and skills of independent creative mastery of new knowledge throughout their active life;
- training of specialists with a high level of professional culture, including a culture of professional communication, who have a civil position, are able to formulate and practically solve modern scientific and practical problems, successfully carry out research, teaching and management activities.

The **relevance** of the educational program "SARUD Sustainable Agriculture and Rural Development" is due to the growing demand for economists - professionals in planning the activities of enterprises and organizations of various forms of ownership and management. No company can exist without economists - after all, as soon as a company appears, the need for planning immediately appears. Therefore, we can say that today an economist is one of the main and most sought-after professions.

**Features of the program.** Education in the magistracy is conducted by a highly qualified teaching staff, including invited foreign professors from leading foreign universities. Undergraduates will be trained in the most modern methods of scientific economic analysis.

**Competitive advantages.** The basis of the educational program is scientific seminars, guest lectures, master classes of famous scientists and practitioners. Scientific and economic research is carried out on the basis of the existing infrastructure of the university. The effective implementation of research activities is facilitated by the functioning of specialized educational and research rooms, subsidiaries of the university.

**Uniqueness.** The educational program "SARUD Sustainable Agriculture and Rural Development" is built on the enhanced integration of educational, methodological and research activities, which is focused on the training of scientific and pedagogical personnel with a high level of knowledge, skills and competencies. The program is based on professorial scientific seminars, author's courses, guest lectures, master classes of famous scientists and practitioners.

**Stakeholders.** The educational program meets the expectations of stakeholders, the goals and objectives of the university. The implementation of the program will allow students to acquire new knowledge, the teaching staff to effectively organize the educational process, train personnel for stakeholders, including the state and business entities.

### **3. Competence model (portrait) of a graduate**

Learning outcomes are defined on the basis of the second level Dublin descriptors and are expressed through competencies. Learning outcomes are formulated both at the level of the entire program and at the level of a module, a separate discipline.

Second level descriptors suggest abilities:

1) demonstrate developmental knowledge and understanding gained at the higher education level that is the basis or opportunity for original development or application of ideas, often in the context of scientific research;

2) apply knowledge, understanding and ability to solve problems in new or unfamiliar situations in contexts and within broader (or interdisciplinary) areas related to the field of study;

3) integrate knowledge, cope with complexity and make judgments based on incomplete or limited information, taking into account the ethical and social responsibility for the application of these judgments and knowledge.

Future professionals will be able to acquire knowledge in the field of economics, management, social sciences, agronomy and ecology, gain access to local and international experience, learn how to apply modern methods of land use planning and assessment of agro-ecosystems, as well as socio-cultural and natural resources. After completing their studies under the SARUD project programs, graduates will be able to independently apply the concepts of rural development to the specifics of local conditions.

#### **3.1 Areas of professional activity**

The direction of training 7M041 Business and management under the educational program "SARUD Sustainable Agriculture and Rural Development" is the field of management (state and local governments, enterprises and organizations of all forms of ownership and activities).

#### **3.2 Types of professional activity**

Master in the direction of training 7M041 Business and Management under the educational program "SARUD Sustainable Agriculture and Rural Development"

- prepares for the following types of professional activities:
  - organizational and managerial;
  - information and analytical;
  - entrepreneurial.

### **3.3 General educational competencies**

A master's student must have general educational competencies that reflect the learning outcomes that characterize the student's abilities:

- demonstrate developing knowledge and understanding in the field of study, based on advanced knowledge of this field, in the development and (or) application of ideas in the context of the study;
- use knowledge, understanding and abilities at a professional level to solve problems in the field of study, taking into account an interdisciplinary approach;
- to collect and systematize information for the formation of judgments, taking into account social, ethical and scientific views;
- have the learning skills necessary to independently continue further education in the field of study.

### **3.4 Basic competencies**

The educational program provides for broad basic professional training, which should be aimed at achieving the fundamental subject knowledge of future specialists. This should provide the undergraduate with a general integral methodology of professional activity, develop the ability of future specialists for professional creativity, and form the need for further improvement of the educational level.

The hierarchy of goals implies a transition from the fundamental foundations of classical education to the basic disciplines of an economic nature and further to the highly specialized disciplines of sustainable agriculture and rural development.

The educational program "SARUD Sustainable Agriculture and Rural Development" contains:

- 1) theoretical training, including the study of cycles of basic and major disciplines;
- 2) additional types of training - various types of professional practices, research work of a master student;
- 3) intermediate and final certification.

The study of the cycle of basic disciplines is aimed at the formation of a set of fundamental knowledge in general theoretical, economic and managerial disciplines. Understanding the relationship between theoretical analysis and empirical data.

The cycle of major disciplines is focused on the study of key theoretical aspects of sustainable agriculture and rural development, theoretical and practical aspects of management at the macro, meso and micro levels.

### **3.5 Professional competencies**

Professional competencies in higher education institutions are the knowledge, skills and abilities necessary for the effective implementation of professional activities in the relevant position.

The educational program "SARUD Sustainable Agriculture and Rural Development" for the training of management personnel with modern knowledge and skills in the field of business, able to manage processes and human resources, shape the company's strategy, be able to determine strategic and operational objectives and achieve them using scientific tools.

#### **4. Base of professional practice**

Research (industrial) practice for a master's student is a mandatory stage of the main program of study in the master's program, after the end of the semester and passing the exams. To have an internship means to conduct research work on the basis of a specific enterprise. This is a good opportunity to consolidate the theoretical knowledge gained and to form the skills of their practical application. The scope of work to be done and the schedule for the internship are set by the Curriculum. The student can choose an enterprise where the student can do an internship on his own. The base of industrial practice is selected in accordance with the scientific interests of the undergraduate. The main bases of practice for undergraduates of the educational program are organizations such as LLP "Novokubanskoye", JSC "Astana Onim", AF "Rodina" and others.

Upon completion of the practice, a report is written and submitted to the department by the supervisor. There are certain requirements for reporting. The undergraduate's practice is evaluated on the basis of his reporting documentation. During his activity, he must keep regular entries in the diary about the stages of his research work. In the process of passing the industrial practice, undergraduates collect material about the activities of the organization, which is then used to write a report and to prepare a master's thesis

The main partner universities in the implementation of joint scientific projects, increasing academic mobility, organizing scientific internships are: Plovdiv Agrarian University (Bulgaria), Omsk State Agrarian University. P.A. Stolypin (Russia), the Higher Agricultural School (France), within the framework of the International Credit Mobility under the EU program "Erasmus +", etc. This model of training undergraduates is one of the most effective.

**5. The structure of the educational program of the master's program in the scientific and pedagogical direction**

№	Name of cycles of disciplines and activities	General labor intensity	
		In academic hours	In academic credits
1	2	3	4
1.	<b>Theoretical training</b>	<b>2640</b>	<b>88</b>
1.1	<b>Cycle of basic disciplines</b>	<b>1050</b>	<b>35</b>
1)	<b>HEI component</b>	<b>600</b>	<b>20</b>
	including:		
	History and philosophy of science	150	5
	Foreign language (professional)	150	5
	Pedagogics of higher school	90	3
	Psychology of management	150	5
	Teaching practice	60	2
2)	<b>Selectable Component</b>	<b>450</b>	<b>15</b>
	Statistical support for the development of rural areas / Development of an information and consulting service in rural areas	150	5
	Rural sociology / Involvement of the population in the development of rural areas	150	5
	Agri-ecotourism / Eco-labeling and marketing of ecological and regional products in rural areas	150	5
1.2	<b>Cycle of major disciplines</b>	<b>1590</b>	<b>53</b>
1)	<b>HEI component</b>	<b>600</b>	<b>20</b>
	Ecological concept, and agriculture. Sustainable development.	150	5
	Technologies for sustainable agriculture (crop production)	150	5
	Technologies for sustainable agriculture (livestock)	150	5

	Sustainable Development of Rural Areas: Approaches to the Development of Regional Programs	150	5
2)	<b>Selectable Component</b>	600	20
	Management of biological resources in rural areas / Organic agriculture	150	5
	Rural development management / Fundamentals and principles of local self- government in rural areas	150	5
	Organization of entrepreneurial activity in rural areas / Economic analysis of the sustainability of economic entities in rural areas	150	5
	Bioeconomics / Environmental regulation and legislation in rural areas	150	5
3)	Research practice	390	13
2	Scientific research work	<b>720</b>	<b>24</b>
1)	Research work of a master student, including an internship and a master's thesis	<b>720</b>	<b>24</b>
3	Additional types of training		
4	Final examination	240	8
1)	Preparation and defense of a master's thesis	240	8
	<b>Total</b>	<b>3600</b>	<b>120</b>



**WORKING CURRICULUM**  
for 2023-2025 academic year  
For the modular education program "SARUD Sustainable Agriculture and Rural Development"  
by the speciality/group of educational programmes M070 - Economy  
Degree: Master's program by specialization (Scientific & pedagogical direction)  
Form of education: Full-time (MS 2 years) semester  
Entry year: 01-09-2023

Module code	Module name	University cycle	University component	Code of subject	Subject name	Academic credits	Control in the academic period					Volume of hours					Distribution of credits per													
							Exams	Differentiated thes. test/pract.	Differentiated thes. (see paper)	Practical: 30%/	Term paper/yo. test	Total	In-class learning	Including			Self-study work of Mr. student	Self-study work of Ms. student	1 course				2 course							
														Lectures	Practicals	Lab. (practicals)			1	2	3	4	1	2	3	4				
General modules																														
1	Social language	BS U	IFN 5206		History and philosophy of science	5	1				150.0	45.0	15	30	0	20	85	5.0												
2		BS U	IYaP 5207		Foreign language (professional)	5	1				150.0	45.0	0	45	0	20	85	5.0												
3		BS U	PVSH 5208		Pedagogics of higher school	3	1				90.0	30.0	15	15	0	12	48	3.0												
4		BS U	PU 5209		Psychology of management	5	1				150.0	45.0	15	30	0	20	85	5.0												
Modules of speciality/education program																														
5	Bioeconomic	AS E	Bio 6307		Bioeconomy	5	3				150.0	45.0	15	30	0	20	85													
6		AS E	PRZST 6313		Environmental regulation and legislation in rural areas	5	3				150.0	45.0	15	30	0	20	85													
7	Research practice	AS U	IP 6315		Research practice	13			390		390.0	0	0	0	0	0	0													
8		BS E	SS 5205		Rural sociology	5	1				150.0	45.0	15	30	0	20	85													
9	Statistical and sociological	BS E	VNRST 5213		Involvement of the population in rural development	5	1				150.0	45.0	15	30	0	20	85													
10		BS E	SCRST 5204		Statistical software rural development	5	1				150.0	45.0	15	30	0	20	85													
11		BS E	RIKSS 5211		Development of information and consultancy services in rural areas	5	1				150.0	45.0	15	30	0	20	85													
12	Resource management in rural areas	AS E	UBRST 5305		Management of biological resources in rural areas	5	2				150.0	45.0	15	30	0	20	85													
13		AS E	OSH 5312		Organic farming	5	2				150.0	45.0	15	30	0	20	85													
14		AS E	URST 6306		Management of development of rural areas	5	3				150.0	45.0	15	30	0	20	85													
15		AS E	OPMSST 6314		Fundamentals and principles of local self-government	5	3				150.0	45.0	15	30	0	20	85													
16	Management by an agribusiness	AS E	OPDSM 6308		Organization of rural entrepreneurship activity	5	3				150.0	45.0	15	30	0	20	85													
17		AS E	EALHSST		Economic analysis of the sustainability of economic entities in rural territories	5	3				150.0	45.0	15	30	0	20	85													
18	Ecology and sustainable	AS U	URSTPRRP		Sustainable development of rural areas: approaches to the development of regional	5	2				150.0	45.0	15	30	0	20	85													
19		AS U	EKSHUR 5316		Ecological concept, and agriculture. Sustainable development.	5	2				150.0	45.0	15	30	0	20	85													
20	Pedagogical	BS U	PP 5214		Pedagogical training	2			60		60.0	0	0	0	0	0	0													
21	Economy at the micro- and meso-	BS E	AGR 5203		Agroecotourism	5	2				150.0	45.0	15	30	0	20	85													
22		BS E	EMMERPST		Environmental labeling and marketing of ecological and regional products in rural	5	2				150.0	45.0	15	30	0	20	85													
23	Technological	AS U	TUSHR 5302		Technologies for sustainable agriculture (crop production)	5	2				150.0	45.0	15	30	0	20	85													
24		AS U	TUSHZ 6304		Technologies for sustainable agriculture (livestock)	5	3				150.0	45.0	15	30	0	20	85													
Scientifically research																														
25	The research work of a master student, including the	R C	NIRVVMD		Master student's research work, including implementation of master's thesis	2			60		60.0	0	0	0	0	0	0	2.0												
26		R C	NIRVVMD		Master student's research work, including implementation of master's thesis	3			90		90.0	0	0	0	0	0	0	3.0												
27		R C	NIRVVMD		Master student's research work, including implementation of master's thesis	10			300		300.0	0	0	0	0	0	0	10.0												
28		R C	NIRVVMD		Master student's research work, including implementation of master's thesis	9			270		270.0	0	0	0	0	0	0	9.0												
<b>Total of theoretical course</b>						<b>112</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>1170</b>	<b>0</b>	<b>3360</b>	<b>660</b>	<b>210</b>	<b>450</b>	<b>0</b>	<b>292</b>	<b>1238</b>	<b>30.0</b>	<b>30.0</b>	<b>30.0</b>	<b>22.0</b>								
AC	<b>Additional courses</b>																													
FA	<b>Final attestation</b>																													
	Master dissertation defence																													
	<b>Total</b>					<b>120</b>				<b>1174</b>		<b>3600</b>	<b>660</b>	<b>210</b>	<b>450</b>	<b>0</b>	<b>292</b>	<b>1238</b>												

Examinations (semester)\* - The final form of control on Physical Culture and types of professional practice is a differentiated credit.

The modular curriculum is made in accordance with the standard curriculum of the speciality (approved by the Order of the MES RK from 16.08.2013 № 343).  
State obligatory standards of education (approved by the Order of the Ministry of Education and Science of the Republic of Kazakhstan from 23.08.2012 № 1080), modular educational programme of the speciality.  
The modular curriculum was considered and approved at the meeting of the methodical commission of the faculty, Protocol № \_\_\_\_\_ 20\_\_

Director of Department of Academic Affairs  
Deputy Director of the Department of Academic Affairs  
Dean of the faculty  
Head of the Department

Жүргізуші Жапонбай Серікбайұлы  
Сайырова Мадина Елжановна  
Темірбекова Аманжол Бектөлеуовна



		developing the ability to make decisions scientifically, planning the activities of other people, and managing into an organization															
<b>Cycle of basic disciplines Selectable component</b>																	
5	Statistical software rural development.	Formation of knowledge and skills of undergraduates in statistical accounting and economic and statistical analysis of rural areas, a system of statistical indicators of the state and development of rural areas, mastering a comprehensive assessment of the sustainable development of rural areas with statistical methods.	5					v									
	Development of information and consultancy services in rural areas.	Basic concepts of information and consulting service in rural areas. The need of rural population to obtain new information. Agricultural producers' problems with ever-increasing information flows. Search, selection in practical use of necessary innovations and information. Effective problem solving mechanism. Development and implementation of information and consulting service development concept.															v
6	Rural sociology	Rural sociology is a branch of sociology that studies the emergence, functioning and development of social systems and institutions of the Republic of Kazakhstan, the sociological patterns of development of the agricultural sector and rural settlements, the peculiarities of the lifestyle of rural residents.	5						v								
	Involvement of the population in rural development.	Rural development fundamentals. Development of rural areas: mechanisms for activation and involvement of local population. Processes for developing programs/projects for development of rural areas. Implementation of programs/projects for development of rural areas. Monitoring the effectiveness of								v							



		and production grouping of field crops. Agricultural crops cultivation innovative technologies.																
10	Technologies for sustainable agriculture (livestock).	The course contributes to formation of knowledge system aimed at studying theoretical and practical foundations of livestock branch, including existing production and processing technologies in dairy and beef breeding, horse, camel, sheep, pig breeding, poultry farming, etc. Studying the main results and innovative methods of conducting work in animal husbandry.	5															v
11	Sustainable development of rural areas: approaches to the development of regional programs.	The discipline is part of Fundamentals of sustainable development module, and is one of two disciplines of the invariant module. Sustainable development: brief history of the concept, a scientific approach. Ecological, economic and social aspects of sustainable development. Population and human resources. Food security. Ecological education and upbringing.	5	v														

**Cycle of major disciplines  
Selectable component**

12	Management of biological resources in rural areas.	Non-urbanized territories resources' use and protection problems' description. Management of non-timber bioresources (wild berries, nuts, mushrooms, tree sap preparation, haymaking, grazing); bioresources of open spaces (meadow resources' use, beekeeping, medicinal plants, haymaking and grazing on pastures); water bodies' biological resources (water bodies' use in agriculture, environmental problems); rational environmental management.	5									v						
	Organic farming	Within framework of the discipline, principles of organic agriculture, principles of existence of ecosystems and agriculture are considered. Organic products production technology. Certification of organic products. Processing, storage,										v						



