Ministry of Agriculture of the Republic of Kazakhstan S.Seifullin Kazakh Agro Technical Research University

APPROVED

Dean of the Faculty of Land

Management, Architecture and

Design

Zh.Z. Toleubekova

2023

## EDUCATIONAL PROGRAM "Cadastre"

Code and classification field of education:
8D07 Engineering, Manufacturing and Civil engineering:

Code and direction of personnel training 8D073 Architecture and Civil engineering

Qualification: Doctor of Philosophy PhD in the educational program "Cadastre"

Period of study: 3 years (scientific and pedagogical)

#### **Authors:**

#### 1. Full name - academic degree, title, position, place of work

Kurmanova Gulnara Kenesovna – Doctor of Economics, Associate Professor of the "Cadastre" Department - Chairman;

-Dyusenbekov Zayrolla Dyusenbekovich - Doctor of Agricultural Sciences,

Professor of the Department of Cadastre;

- Abeldina Rauza Kaltaevna - Ph.D., Associate Professor of the Department of Cadastre Department,

- Garkushina Valentina Vasilievna - Ph.D., Associate Professor of the Department of

Cadastre;

From production employers:

- Sadanov M.A. - Director of the branch the NJSC State Corporation "Government for Citizens" in Astana;

- Dautalinov R.B. - Director of the Land Cadastre Department the NJSC State

Corporation "Government for Citizens";

- Mukasheva M.M. Head of the State Land Cadastre Department the Committee for Land Resources Management the Ministry of Agriculture of the Republic of Kazakhstan.

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#### 1 Educational program passport

1.1 The purpose of the educational program is to train competitive scientific and teaching personnel under the educational program "Cadastre", who have professional and scientific competencies and skills for their implementation in the system of higher and postgraduate education and the scientific field.

1.2 learning outcomes

PO1. Integrate techniques for searching information in scientific databases, master various genres of academic writing

PO2. Use new methods and carry out scientific research in order to find

solutions to problematic problems in cadastral activities

PO3. Apply methods of territorial planning and forecasting; draw up project plans at different territorial levels

PO4. Own modern technologies in order to provide new methodological

approaches to involve unused lands in agricultural circulation

PO5. Solve cadastre problems in market conditions, have skills in working in the e-government system

## 2. General characteristics of the educational program

The educational doctoral program "Cadastre" is aimed at:

- study and research of problems in the field of development of the land cadastre and the formation of a real estate cadastre in the Republic of Kazakhstan;

- determination of the effectiveness of the land cadastre and real estate cadastre at the level of administrative-territorial entities, socio-economic studies of modern management processes in the region based on the formation of a unified information space;

- formation and development of a unified information system of the real estate

cadastre in Kazakhstan,

- formation of a data bank of the real estate cadastre at various administrative

and territorial levels:

- development of a methodology for the management of the land and property complex, models and methods for optimizing information support for the management of territories and EGKN objects in a real-time system,

- development of methods for technical and technological support for

informatization of the real estate cadastre and land monitoring.

### 3 Competency model (portrait) of a graduate

After completing the EP "Cadastre" the student will:

- a qualified researcher who can independently conduct scientific research in the field of cadastre and regulation of land relations, master the methodology of scientific analysis and thinking, scientific and methodological approaches and methods of decision-making and their implementation in practice;

- be able to identify and skillfully solve practical and professional problems in

the field of cadastre and land management;

- know and understand the basic approaches to the formation of spatial data; main functions, structure, technologies for creating and developing spatial data infrastructure, taking into account the features of informatization and digitalization in the Republic of Kazakhstan in order to improve land relations;

- is able to make a contribution based on scientific research that expands the scope of existing knowledge by developing schemes for planning the development and construction of territories of settlements, improving the organization of land

cadastral work based on geoinformation technologies;

- have knowledge, skills and abilities in the field of economic and legal regulation of land relations, management of land resources and real estate, taking into

account the characteristics of a market economy and its capabilities;

- know and understand current trends in the land policy of the Republic of Kazakhstan, be able to assess current problems and prospects for the socio-economic development of Kazakhstan and develop proposals for finding solutions based on scientific research.

#### 3.1 Areas of professional activity

Areas of professional activity are:

- scientific and educational activities in higher educational institutions in the field:

- scientific and managerial activities in research and production centers, research institutes, divisions of State government bodies and the non-state sector;

- management activities in the structural divisions of the Committee for Land Resources Management of the Ministry of Agriculture of the Republic of Kazakhstan, NJSC "Government for Citizens" and its branches, departments of architecture, urban planning and land relations under akimats of the district, city and regional level, in structural divisions of the general plan and other organizations, related to the regulation of land relations.

3.2 Types of professional activities

Doctoral students in the educational program "Cadastre" can perform the following types of professional activities:

- in the field of scientific and scientific-pedagogical activities;

- carrying out theoretical and experimental research;

- theoretical and applied tasks in research on cadastre problems and the search for their solutions;

- problems of pedagogical training of students at the university;

- professional and comprehensive analysis of problems in the field of cadastre.

3.3 Basic competencies

- demonstrate a systematic understanding of the field of study, mastery of skills and research methods used in the field of cadastre;

- plan, develop, implement and adjust the complex process of scientific

research;

- contribute with their own original research to expanding the boundaries of the scientific field, which may merit publication at the national or international level;

- critically analyze, evaluate and synthesize new and complex ideas;

- communicate your knowledge and achievements to colleagues, the scientific community and the general public;

- promote the development of a knowledge-based society.

3.4 Professional competencies

1) master the methodology of a systematic approach to the organization, modern approaches to management and analytical methods of management, methods of diagnosis, analysis and problem solving, as well as methods of decision-making and their implementation in practice;

2) skillfully solve practical management problems and implement these decisions, be prepared to perform management functions and be able to solve

professional problems in the interests of the organization as a whole;

3) have the knowledge, skills and abilities necessary to occupy the relevant managerial position and based on a deep understanding of the characteristics of a market economy and its capabilities, functions and economic role of the state, understanding of environmental problems, awareness of the social responsibility of business and adherence to civilized ethical standards of its conduct:

4) be able to assess current problems and prospects for the socio-economic development of Kazakhstan, understand current trends in the development of the world economy and globalization, and navigate issues of international competition.

4 Base for research and teaching practices (internships) (all types of practices).

The base for research practice is the NJSC "Government for Citizens" and its

branches, the RSE "Gosgradkadastr".

The basis for teaching practice is the Department of Cadastre of the Kazakh

Agrotechnical University named after. S. Seifullina.

Much attention is paid to concluding agreements and memorandums with foreign partner universities for the purpose of cooperation in the development of joint EP, attracting foreign scientists to scientific supervision in writing doctoral dissertations, doctoral students undergoing scientific internships, performing joint research, writing scientific articles, etc.

To date, agreements have been concluded with the State University of Health (Russian Federation, Moscow), the University named after. Alexandras Stuglinkis (Lithuania, Kaunas), Latvian Agricultural University (Latvia, Riga), Putra University (Malaysia, Kuala Lumpur), Warsaw Polytechnic University (Poland, Warsaw), Omsk State Agrarian University (Russia, Omsk); Siberian State University of Geosystems and Technologies (Russia, Novosibirsk), etc.

# 5 Structure of the doctoral educational program in the scientific and pedagogical direction

		Total labo	r intensity
No	Name of cycles and disciplines	in academic hours	in academic credits
1	2	3	4
1.	Educational component (DB+PD)	1350	45
1.1	Cycle of basic disciplines (BD)	600	20
1)	University component		
	Academic writing	150	5
	Teaching practice	300	10
	Scientific Research Methods	150	5
1.2	Cycle of major disciplines (PD)	750	25
1)	University component:		
	Cadastral provision of unused lands	150	5
	Territorial planning and forecasting	150	5
	Scientific and methodological problems of the cadastre	150	5
	Research practice	300	10
2	Research work		
1)	Research work of a doctoral student, including internship and completion of a doctoral dissertation	3690	123
3	Additional types of training	-	
4	Final certification, including writing and defending a doctoral dissertation	360	12
	Total	5400	180

### Schedule of the educational process

Приложение 1 к. Академическому календиро Утвераден на Ученом свете НАО "КАТНУ по ССейфуллина", протоког №16 от 29.05.2023 г.

График учебного процесса на 2021-2024 учебный гед для образов втельных программ факультета "Управлении земельными ресурсами, архитектуры и даждани" ДОКТОРАНТУРА

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#### Working curriculum

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Рассызотреню

РАБОЧИЙ УЧЕ КНЫЙ ПЛАН

из 2023-2026 учебные годы

для Медуданой обра конвеньной программа "Кадастр"

область обра конвукта SDO7 - Нукла вершан, обра бълва нашае и строительные ограсли

интравление подготовки ED073 
съвещенамоста туртина обра конвеньным програми D128 - Земле устройство

Стелень "Токлорытура по метраменным (маучно-педиотелесное)

форма обучение Оклам Сумла органура в-та 3 годы) съвестрая

Тод поступление 25-05-2023

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8	Научное обеспечение	пд	ВК	NMPK7303	Научно-методические проблемы кадастра	5	2					150.0	45.0	15	30	0	20	85		5.0				
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9		ниР	ОК	NRDWDD 7501	Научно-исследовательская работа докторанта, включая выполнение докторской диссеотации	15				450		450.0		0	0	0	0	0	15.0					
10	1	ниР	ОК	NRDWDD 7502	Научно-исследовательская работа докторянта, включая выполнение докторокой диссентации	15				450		450.0		0	0	0	0	0	TE	15.0				
11	няучно-	ниР	ОК	NRDWDD 8504	Научно-исследовательская работа докторанта, вслючая выполнение докторской диссертации	20				600		600.0		0	0	0	0	0			20.0			
12	исследовательский	ниР	ОК	NRDWDD 8505	Научно-иоследовательская работа докторанта, включая выполнение докторокой высовотамия	25				750		750.0		0	0	0	0	0				25.0		
13		ниР	ок	NRDWDD 9507	Научно-исследовательская работа докторента, включая выполнение докторокой диссектации	30				900		900.0		0	0	0	0	0					30.0	
14		ниР	ОК	NIRDWDD 9508	Научно-исследовательская работа докторента, включая выполнение докторокой диссептации	18			Lucia	540		540.0		0	0	0	0	0						18.0
rore 1	теоретического обучени	(R	donner			168	5	0	0	4290	0	5040	225	75	150	0	100	425	30.0	30.0	30.0	30.0	30.0	18.0
ДВО		LL ODV	чения	l												0		978.00						
	Итоговая аттестация	Total Control of Contr	ALTERNATION AND PARTY OF			12									380.0									
THE STATE OF		***************************************				12				5					380									
*********	Итого		**********			180				4295		5400	225	75	150	0	100	425						

Директор Департамента по вваде мическим вопросам Зеоеспитеть директора Департамента по ява демическим вопросам Декан факультега Заведующий кафедрай

Жургения Жакинбай Сарсинбання

Толиубекова Жакат Зекиновка Акантов Болет Жуметалискогч The matrix of achievability of the formed learning outcomes according to the educational program with the help of academic disciplines

No.	Name of discipline	Short description of discipline	Credits	F	ormed	earning	outcon	ies
				ON 1	ON 2	ON 3	ON 4	ON 5
		Cycle of basic disciplines						
		University component						
1	Academic writing	The course aims to equip doctoral students with concepts and models of academic writing. Doctoral students will develop the skills and abilities of writing academic, scientific text, and various written scientific discourses. Doctoral students will be able to analyze and evaluate written works of various levels, be able to work with authentic sources, and also justify their own point of view	5	+				
2	Scientific Research Methods	Studies methods for posing a scientific problem based on revealing the contradictions between currently available knowledge about the object of research and the knowledge necessary for the practical solution of a problem demanded by society. Forms the skills of choosing a topic and scientific substantiation of its relevance for practical application, organizing and conducting research work, and documenting scientific results.	5		+			
3	Cadastral provision of unused lands	Planning and organization of cadastral support for work on unused lands. Theoretical and methodological foundations and justification of measures to bring unused lands into circulation. Stock data, land remote sensing data, information obtained from government information systems and electronic information resources. Valuation of unused land. Economic efficiency of land management support for the involvement of unused lands in agricultural circulation	5				+	
4	Scientific and methodological problems of the cadastre	Cadastre as the basis of the system of agrarian relations. Scientific and methodological approaches in the development of cadastre. Current state, cadastre problems in market conditions and ways to solve them. The role of the cadastre in the system of e-government and land management.						+
5	Territorial planning and forecasting	Fundamentals of territorial planning. Design objects. Contents of territorial planning schemes and projects. Urban zoning.	5			+		

