

«MUKHAMEDZHAN TYNYSHPAEV ALT UNIVERSITY» JSC

APPROVED  
Chairman of «ALT University» JSC  
S. Amirgaliyeva  
Decision of the Academic Council of  
«ALT University» JSC  
« 30 » 2024 (Protocol № 9)



THE PROGRAM  
OF THE ADMISSION EXAM TO THE DOCTORAL PROGRAM

Group of educational programs  
«D147 - Transport services»

Almaty 2024

**The entrance exam program** was discussed and received a positive decision at the meeting of the department «Traffic Organization and Operation of Transport», protocol No. 8 dated April 17, 2024.

**Head of the Department of «Organization of transportation and operation of transport»**



**Z.K. Bitileuova**

**The entrance exam program** was reviewed and recommended at a meeting of the Council of the Institute «Logistics and Management», protocol No. 5 dated April 22, 2024.

**Chairman of the SI "Logistics and Management"**



**G.S. Musaeva**

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## 1. The purpose of the entrance exam for a group of educational programs

The purpose of the entrance exam for groups of educational programs is to determine the theoretical and practical preparedness of an applicant for doctoral studies, the level of compliance of knowledge, skills and abilities with the requirements of doctoral studies in the field of preparation.

The entrance exam to doctoral studies consists of writing an essay, passing a test for readiness to study in doctoral studies and an exam on the profile of a group of educational programs.

## 2. Regulations for the entrance examination to doctoral studies for a group of educational programs

The duration of the entrance exam is 3 hours 10 minutes, during which the applicant is interviewed, writes an essay, takes a test for readiness to study for doctoral studies, and answers an electronic examination card consisting of 3 questions. The list of questions and essay topics is generated in random order. The maximum score for the entrance exam is 100 points, of which the interview is 30 points, the essay is 20 points, and the GOP profile exam is 50 points.

## 3. Types and criteria of assessment

### 3.1 Interview assessment criteria

Interviews for persons entering doctoral studies are carried out by the OVPO independently before passing the entrance exams in the blocks «Writing an essay» and «Answering exam questions on the profile of a group of educational programs.»

The following interview rules are provided:

- 1) Video recording of the interview is strictly required for both formats. The video recording is stored in the archive for at least three years.
- 2) The duration of the interview is 20 minutes per applicant (15 minutes for conversation and 5 minutes for assessment).
- 3) The interview is documented in a protocol, which is signed by the chairman, members and secretary of the examination committee
- 4) If the applicant fails to appear for the interview, the date of the interview cannot be rescheduled and 0 points are given and he is not allowed to take the foreign economic activity
- 5) If an applicant fails to appear for an interview, the date of the interview cannot be rescheduled and 0 points are given and he is not allowed to take the foreign economic activity.
- 6) The result of the interview is reflected in your personal account in the «admission»/«non-admission» format.

### Interview assessment criteria

№	Criteria	Descriptors	Points
1.	Motivation	Argumentation of motives for doctoral studies in the chosen EP and admission to a specific university. Vision of prospects for professional and personal growth upon completion of training.	7
2	Research competence	Possession of the research skills and experience necessary for research activities in a specific subject area.	9

3.	Creativity	Non-standard thinking, creative and alternative approaches to solving problems and situational problems.	8
4.	Communication skills	The ability to briefly, representatively, logically, and reasonably express one's point of view, make generalizations and conclusions. Language skills.	6
<b>Maximum points</b>			<b>30</b>

### 3.2 Criteria for assessing essays

The essay is a reasoned written presentation of the author's position on the problem posed on the basis of independently conducted analysis using the concepts and analytical tools of scientific knowledge.

Types of essays: motivational essay revealing the motivation for research activities, scientific-analytical essay justifying the relevance and methodology of the planned research, problem/thematic essay reflecting various aspects of scientific knowledge in the subject area. The number of essay topics is 10. The essay should not contain graphic objects, symbols and formulas. The recommended number of words in an essay is 250-300.

#### Types and criteria for assessing essays

Types of essays	Description	Essay length
Motivational	Argumentation of the applicant about the incentives for research activities (research statement)	Not less than 250 words
Scientific analytical	Justification for applicants of the relevance and methodology of the proposed research (research proposal)	
Problem-thematic	Statement of the author's position on current aspects of subject knowledge	

Criteria	Descriptors	Points
Depth of the topic 6 points	the problem is revealed at a theoretical level, with the correct use of scientific terms and concepts	4
	one's own point of view (position, attitude) is presented when disclosing the problem	2
Argumentation, evidence base 6 points	the presence of arguments from scientific literature and sources relevant to the topic of the essay	6
Compositional integrity and logic of presentation 4 points	the presence of compositional integrity, the structural components of the essay are logically connected	4
Speech culture 4 points	demonstration of a high level of academic writing (vocabulary, knowledge of scientific terminology, grammar, style)	4

<b>Maximum points</b>	20
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### 3.3 Criteria for assessing answers to questions on the electronic examination card

The exam on the profile of a group of educational programs includes 3 blocks of questions, of which: 1st question determines the level and consistency of theoretical knowledge; The 2nd question reveals the degree of development of functional competencies; The 3rd question is aimed at identifying system competencies. The maximum number of points is 50.

The number of questions for the electronic exam card is 150 (50 for each block of questions).

When formulating exam questions, compliance with the Dublin descriptors and Bloom's taxonomy was observed so that the applicants' answers could reveal a systematic understanding in the subject area, knowledge of methodology and research methods, and determine the ability to critically analyze, synthesize and evaluate ideas.

The electronic examination ticket consists of 3 questions:

<b>Blocks</b>	<b>Nature of the question</b>	<b>Number of points</b>
1st question	теоретический - определяет уровень и системность теоретических знаний	14
2 st question	практический - выявляет степень сформированности функциональных компетенций (умение применять методики, технологии и техники в предметной области)	18
3 st question	выявляет системное понимание изучаемой предметной области, специализированные знания в области методологии исследования (системные компетенции)	18
<b>TOTAL</b>		<b>50</b>

Criteria for assessing answers to questions on the electronic examination card:

<b>Question</b>	<b>Evaluation criteria</b>	<b>Number of points</b>
1st question	demonstrates knowledge of the basic processes of the subject area being studied; depth and completeness of disclosure of the issue	7
	logically and consistently expresses his own opinion on the issue under discussion	4
	masters the conceptual and categorical apparatus, scientific terminology	3
	<b>Total</b>	<b>14</b>
2 st question	applies methods, techniques, technologies to solve problems in the subject area	9
	argues, compares, classifies phenomena, events, processes; draws conclusions and generalizations based on practical skills	6
	analyzes information from various sources	3
	<b>Total</b>	<b>18</b>
3 st question	critically analyzes and evaluates theoretical and	9

	practical developments, scientific concepts and current trends in the development of science	
	synthesizes methodological approaches in interpretation main problems of subject knowledge	6
	identifies cause-and-effect relationships when analyzing processes, phenomena, events	3
	<b>Total</b>	<b>18</b>
	<b>TOTAL</b>	<b>50 points</b>

#### 4. Contents of examination materials

Examination materials for entrance examinations to doctoral studies for groups of educational programs, including essay topics, examination questions on the profile are written in three languages: Kazakh, Russian and English.

The topics of the examination questions correspond to selected sections from the curriculum cycles provided for groups of educational programs «D147-Transport Services»:

№	Name of disciplines
1	Scientific Research Methods
2	Scientific research into the transportation process
3	Improving cargo and commercial operations

#### Contents of sections in blocks taken for the entrance exam

##### Block 1

##### *Section topics*

Development, types and performance indicators of transport  
 Transport science history, content and functions  
 The concept of scientific knowledge  
 Concept of transportation and transport process  
 Ensuring traffic safety  
 Freight and passenger transportation

##### Block 2

##### *Section topics*

Methods and methodologies in transport science  
 Innovations in the transport industry  
 Simulation modeling of transport systems  
 Geographic information systems in transport systems

##### Block 3

##### *Section topics*

Transport process as a system with a discrete state  
 Design of the cargo and passenger delivery process and feasibility study  
 Transport system management concept

## 5. Recommended reading

1. Методология исследований и развития технологий эксплуатации автомобильного транспорта: учеб. пособие / С.М. Мороз, А.Н. Ременцов. – М.: МАДИ, 2013. – 216 с.
2. Комкин А.С., Лопарев А.А. История и методология транспортной науки: Учебно-методическое пособие для обучающихся на инженерном факультете по направлениям подготовки 23.04.03 – Эксплуатация транспортно-технологических машин и комплексов и 35.04.06 – Агроинженерия. – Киров: Вятская ГСХА, 2018. – 73 с
3. Транспортная логистика (II часть): // ЕНУ им. Л.Н. Гумилева / Т.Б. Сулейменов, М.И. Арпабеков - Астана, 2012 - 211 с
4. Организация транспортных услуг и безопасность транспортного процесса: учебное пособие для студентов вузов, обучающихся по направлению подготовки бакалавров «Технология транспортных процессов» / Н. В. Пеньшин. – Тамбов : Изд-во ФГБОУ ВПО «ТГТУ», 2014. – 476 с.
5. Управление грузовой и коммерческой работой на железнодорожном транспорте : учебно-метод. пособие / О. В. Молчанова, И. С. Плахотич. – Екатеринбург: УрГУПС, 2019. – 183 с.
6. Транспортная логистика (I часть): Учебник.// ЕНУ им. Л.Н. Гумилева / Т.Б. Сулейменов, М.И. Арпабеков - Астана, 2012 , - 211 с.
7. Теория транспортных процессов и систем: учебник для академического бакалавриата / А. Э. Горев. — 2-е изд., испр. и доп. — М.: Издательство Юрайт, 2017. — 217 с
8. Витвицкий Е.Е. Теория транспортных процессов и систем (Грузовые автомобильные перевозки): учеб. пособие: Омск: СибАДИ, 2010. - 207 с.
9. Общий технико-экономический курс железных дорог: Учебник/ Под ред. Д. А. Мачерета – М.: РУТ (МИИТ), 2017. – 364 с
10. Экономика на автомобильном транспорте: учеб. пособие / Н.В. Напхоненко; Южно-Российский государственный политехнический университет (НПИ) имени М.И. Платова. – Новочеркасск: ЮРГПУ (НПИ), 2015. – 169 с.
11. Терёшина Н.П., Подсорин В.А., Данилина М.Г. Экономика железнодорожного транспорта: Учебное пособие – М.: МГУПС (МИИТ), 2017. – 262 с.
12. Транспортное планирование: формирование эффективных транспортных систем крупных городов: монография / Ю.В. Трофименко, М.Р. Якимов. – М.: Логос, 2013. – 464 с.