Ministry of agriculture of the Republic of Kazakhstan Kazakh agrotechnical University. S. Seifullin

Considered CLAIM at the meeting of the Academic Council of the University Protocol № 16 from "27" мау 2021у.

	Dean of the
TEXHIKATAN	Technical Faculty
and the	<u> </u>
24 "	<u>2021y.</u>

EDUCATIONAL PROGRAM "Transport, transport equipment and technologies"

Education area code and classification: 8D07 - Engineering, manufacturing and construction industries Code and classification of training areas: 8D071 - Engineering and engineering Code in the International standard classification of education: 0710 Qualification: doctor of philosophy (PhD)

Duration of training: 3 years

Nur-Sultan 2021

Group of authors:

1. Balgabekov Toleu Kunzholovich, c.t.s., associate Professor, head. Department of Transport engineering and technology, KATU. S. Seifullin;

2. Abdrakhmanov Andesh Bakitzhanovich, c.t.s., associate Professor, Department of Transport engineering and technology, KATU. S. Seifullin;

3. Orazaliev Berikbay Tleugabylovich, c.t.s., associate Professor, Department of Transport engineering and technology, KATU. S. Seifullin.

- 4. Pulatov Nurmakhan Saparbekovich, Chairman of the Board of JSC " Bus Park № 1»;
- 5. Tleubergenov Baurzhan Tuyakovich, Director of LLC "Bus Park № 3 SK»;

6. Dimitar Petkov Karaivanov, doctor of technical Sciences, Professor of chemical technology and metallurgical University, Bulgaria, city of Sofia (foreign scholar).

The team of authors approved by order of JSC " KATU.S. Seifullin" № 964-N from 28.12.2018 y.

Educational program 8D104 - "Transport, transport equipment and technologies"

Date of registration in the Registry: 19.09.2019 Date of EP passport updating: 19.09.2019 15:26 Registration number: 8D07100059 OHPE (Developer): S.Seifullin Kazakh AgroTechnical university Field of education: 8D07 Инженерные, обрабатывающие и строительные отрасли Direction of personnel training: 8D071 Engineering and engineering trades Group of educational programs: D104 Transport, transport equipment and technologies Educational program: 8D07106 Transport, transport equipment and technology Formation of General cultural and professional competences of doctoral students, providing high quality educational services in the field of postgraduate education and competence in training for the transport sector of the economy of the Republic of Kazakhstan through the implementation of the principles of the Bologna process and modern standards. EP type: Acting EP Level on NOF: 8 Level on SOF: 8 EP distinctive features: No Language of education: russian, kazakh Volume of the credits: 180 The awarded academic degree: Master Period of study: 3 Date of approval EP on the Academic Council: 30.05.2019 Existence of the annex to the license for the direction of personnel training The license number on the direction of training: 0062189 EP accreditation existence: there is

The formed educational outcomes

N⁰	Educational outcome	Код		
п/п		ON 1		
1	The ability to define the goals and objectives of the thesis, the basics of design of experiments, statistical			
	treatment, correlation and regression analysis, methods of research functions, methods of solving differential equations, the nature and purpose of statistical methods of modeling and forecasting as well as to consider various factors when you build the structure of their interactions and the identification of priority issues of transportation.			
2	Ability to organize and carry out fundamental and applied research in the field of operation of transport	ON 2		
	equipment and technology and on their basis to develop scientific projects and design, technological, design and estimate documentation for the transport system.			
3	Critical understanding and analysis of options for solving transport problems and predicting	ON 3		
	consequences, planning and implementation of solutions to problems of vehicle operation; apply the			
	theory of similarity and dimensions in solving transport problems, develop mathematical models using			
	differential equations in modern mathematical apparatus and information technology.			
4	Ability to develop national and international standards in the field of transport machinery and	ON 4		
	technologies, planning and processing of experiment results in the application of methods of theory of			
	similarity and dimensions and mathematical analysis to use for solving specific problems of transport			
	exploitation mastered the methods of modeling and forecasting, to use mathematical tools and			
	appropriate information technology to conduct informative analysis and to interpret the obtained results.			
5	Possession of skills of technological design of objects of infrastructure of external and intracity transport;	ON 5		
	to apply modern concepts and technologies of construction of transport systems and supply chains; to set			
	and solve problems of optimization of resources at the solution of transport problems; to choose			
	organizational structure of management of transport at the level of the enterprise; to define optimum			
	parameters.			
6	Analysis of efficiency of innovations and innovative activity of transport enterprises, correct application	ON 6		

	of practical management skills in innovative processes of transport equipment and technology; use the acquired knowledge for original development and application of ideas in the context of scientific research; critically analyze existing concepts, theories and approaches to the analysis of processes and phenomena; integrate knowledge gained in different disciplines to solve research problems in new unfamiliar conditions; to carry out information-analytical and information-bibliographic work with the	
involvement of modern information technologies.		
7 Possession of skills of the address with modern equipment, ability to use information technologies,		ON 7
modern packages of computer modeling and the engineering analysis at performance of dissertations and		
scientific projects; to think creatively and creatively to the solution of new problems and situations; to be		
fluent in a foreign language at the professional level allowing to translate, generalize results of research		
	and analytical work in the form of the dissertation, scientific article.	
8	Ability to work in a team, to be flexible and mobile in various conditions and situations related to	ON 8
	professional activity, possession of decision-making skills in conditions of uncertainty and risk;	
	expansion and deepening of knowledge necessary for daily professional activity and continuing	
	education during professional activity.	

Data on disciplines

№ п/п	Name of discipline	Short description of discipline	Cycle	Component	Credits
1	Academic writing	Using of preparation techniques for writing (free writing, brainstorming), drawing up a plan. The basic principles of writing an essay. Work with scientific texts: review. Work with scientific texts: annotation. Bibliography basics: links, description. Review of a scientific publication. Writing a abstract of a scientific article. Academic text editing. Presentation development of own project.	BD	UC	5
2	Methods of scientific researches	The formulation of scientific problems on the basis of existing contradictions between the currently available data on research objects and the knowledge necessary for practical solutions to problems demanded by the society. The topics choice and the scientific justification of its relevance for practical application. Hypothesis formulation, research plan development. Methods of theoretical, experimental research and scientific results presentation.	BD	UC	5
3	Fundamentals of scientific experiments	To work in packages of applied programs on planning and processing of results of experiment, use of methods of mathematical modeling when carrying out scientific researches; to represent results of analytical and research work in the form of speech, report, information review, analytical report, article.	BD	UC	4
4	Organization and planning of research	On the basics of inventive activity and registration of all necessary documents; conducting theoretical and experimental research; examination of scientific projects and research; analytical and experimental research activities; patent search and experience in the transfer of	BD	EC	3

		scientific information using modern information and innovative technologies.			
5	Management of innovative projects in transport	Fundamentals of state innovation policy and basic approaches to innovation management in the transport industry and in the processes of creation and development of transport facilities; basic concepts and definitions: innovation, innovation, invention, discovery, innovation, scientific and technological progress, innovation, innovation, innovation process.	PD	EC	3

Head of the Department "Transport Equipment and Technologies"

Balgabekov T. K.