

«APPROVED BY»
 Vice-Rector for Science and
 Cooperation of the
 Academy of Logistics and
 Transport



G.K. Balbayev
 2023 year

**PERSPECTIVE PLAN
 for Scientific Research Work of
 the Academy of Logistics and Transport
 for 2023-2024**

№	Name of the SRW	Head of SRW	Number of Executives				Stages, deadlines for completion, and report submission
			Teaching staff	Doctoral students	Master's students	students	
1	Institute of Automation and Telecommunication						
1.1	Department of Information and Communication Technologies						
1.1.1	Development of a unified decision-making system for a sustainable transportation system based on artificial intelligence	Kasymova D.T., PhD, Head of the Department	5	1	-	-	Interim Report – December 2024
1.1.2	Intelligent control algorithms for public transportation in small cities: optimization of traffic flow and passenger service	Kasymova D.T., PhD, Head of the Department	5	1	1	2	Interim Report – December 2024
1.1.3	Research and development of an autonomous mobile energy supply system for sheep farms	Kasym R.T., senior lecturer	1	1	-	-	The final report – December 2024.
1.2	Department of Power Engineering						
1.2.1	Development of an industrial prototype of a microprocessor-based high-speed automatic backup power supply (MB HSABPS) for mass production in Kazakhstan	Sadykbek T.A., Doctor of Technical Sciences, Assistant Professor	1	1	1		According to the announced grant funding competition
1.2.2	Research and Improvement of Operational Characteristics of Current Collectors for Electric Rolling Stock	Utepbergenova S.M., senior lecturer	3	-	1	5	According to the announced grant funding competition
1.2.3	Improving the Reliability of External Insulation of Power	Orzhanova Zh.K., Ph.D., Associate	3	1	1	-	According to the announced grant

	Equipment in Conditions of Pollution and Moisture	Professor, Assistant Professor					1	funding competition
1.2.4	Improvement of Methods and Means for Ensuring Reliable Operation of Electrical Systems	Orzhanova Zh.K., Ph.D., Associate Professor, Assistant Professor	2	-	2		1	Interim Report – May 2024, May 2025
1.3	Department of Automation and Control							
1.3.1	Development of a National Microprocessor-based Railway Automation and Telemechanics System. Research and Development of Algorithms for the Operation of the National Microprocessor-based Interlocking and Signaling System	Sansyzbai K.M., PhD, Head of the Department	1	4	1		-	Interim report – May 2022, May 2023, final – May 2024
	Research and Optimization of Algorithms for an Intelligent Digital Train Traffic Management System	Orunbekov M.B., senior lecturer	1	1	-		-	Interim report – December 2023, Final – November 2024
2	Institute of Transport Engineering							
2.1	Department of Motor Vehicles and Life Safety							
2.1.1	Improving the Efficiency of Machinery for Railway Construction and Maintenance. Development of Non-shovel Inertial Bottom Unloading Rotors in Excavation and Transport Machines	Zhusupov K.A., Professor of ALT	11	1				Interim report – May 2024
2.2	Department of Construction engineering							
2.2.1	Research on Current Issues in the Mechanics of Deformable Bodies	Zhadraev R.J., Candidate of Technical Sciences, Associate Professor	2				2	Interim report – May 2024
2.2.2	Development of a Methodology for Determining the Forces Acting on Rails During Operation	Bondar I.S., Candidate of Technical Sciences, PhD, Associate Professor of ALT	4	2	2		2	Interim report – May 2024
2.3	Department of Rolling Stock							
2.3.1	Optimization of Design and Operational Characteristics of Stamped-Welded Freight Cars	Solonenko V.G., Doctor of Technical	6	-	1		1	Final report – May 2022

		Sciences, Professor					
2.3.2	Analysis of Parameters of the Working Process of Transportation Power Plants	Bakyt G.B., PhD, Associate Professor	6	1	1	1	Final report – May 2022
3	Institute of Logistics and Management						
3.1	Department of Organization of transportation and operation of transport						
3.1.1	Optimization of the Organization of Bulk Cargo Route Transportations	Aikumbekov M.N., Candidate of Technical Sciences, Associate Professor ALT	7	2	2	5	Interim report – December 2021, April 2022
3.2	Department of Transport Logistic and Management						
3.2.1	Development of Scientific and Methodological Foundations for the Technology of Blockchain Utilization in Organizing Automobile Transportations through the Transit Corridor Western China - Western Europe	Zhanbirov Zh.G., Doctor of Technical Sciences, Professor	4	1	2	5	Interim report – December 2024, final report – December 2025
3.2.2	Development of an Optimal Model for Enhancing the Transit Potential of the Republic of Kazakhstan through Organizing Multimodal Freight Transport: Issues and Perspectives	Mussaliyeva R.D., Candidate of Technical Sciences, Associate Professor of ALT	4	1	3	3	Interim report – December 2024, final report – December 2025
3.2.3	Influence of Control Function on Employee Productivity	Akhmetzhanova A.H., Candidate of Economic Sciences, Assistant Professor	5	-	3	3	Interim report – December 2024, final report – December 2025
4	Institute of Basic and Distance Education						
4.1	Department of Social and Humanitarian Disciplines and Physical Education						
4.1.1	Actual problems of studying a person as a subject of social and physical activity	Lyapbaeva N.I., Candidate of Sociological Sciences	11	1	3	-	Interim report – December 2024, Final report – June 2025
4.1.2	Diagnosis of the Level of Radicalism Among the Student Youth of Kazakhstan	Lyapbaeva N.I., Candidate of Sociological Sciences	11	1	3	-	Interim report – December 2024, final report – June 2025
4.2	Department of Language Training						
4.2.1	Teaching effectively with innovative technology	Adilbayeva U.B., Candidate of Philological Sciences,	9	-	-	-	Interim Report – December 2024

		Assistant Professor of ALT					
4.2.2	Types of games used in the classroom	Aliyeva S.A., senior lecturer	2	-	-	-	Interim Report – December 2024
4.2.3	Methods and technologies of teaching the Russian language	Kunakova G.U., Candidate of Pedagogical Sciences, Assistant Professor of ALT	8	-	-	-	Interim Report – December 2024
	TOTAL		112	20	27	30	

Director of the Department of Science and Innovation

Yermoldina G.T.

Director of the Institute of Automation and Telecommunications

Toigozhinova A.Zh.

Director of the Institute of Logistics and Management

Musayeva G.S.

Director of the Institute of Transport Engineering

Abdreshov Sh.A.

Director of the Institute of Basic and Distance Education"

Tashimbetova A.T.