NCJS «KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY
named after K.I.SATBAYEV»

School of transport engineering and logistics named after M. Tynyshpayev
«Logistics» direction

EDUCATIONAL PROGRAM

7M11301 Transport services

Code and classification of the field of education: **7M11 Services**
Code and classification of training directions: **7M113 Transport services**
Group of educational programs: **M151 Transport services**
Level based on NQF: **7**
Level based on IQF: **7**
Study period: **2**
Amount of credits: **120**

Almaty 2025

Educational Program 7M11301 "Transport Services"
approved at the meeting of the Academic Council of Satbayev University.
Protocol No. 10 dated March 6, 2025.
Reviewed and recommended for approval at the meeting of the Educational and Methodological Council of Satbayev University.
Protocol No. 3 dated December 20, 2024.

The Educational Program 7M11301 "Transport Services"
was developed by the Academic Committee in the field of study 7M113 "Transport Services."

Full name	Academic degree / title	Position	Workplace	Signature
Chair of the Academic Committee:				
Bektilyovov Aldabergen Yusupovich	PhD	Acting Head	Satbayev University	
Faculty members:				
Bekzhanova Saule Ertaevna	Doctor of Technical Sciences, Professor	Professor	Satbayev University	
Mukhanova Gulmira Samudinovna	Candidate of Technical Sciences, Associate Professor	Professor	Satbayev University	
Tymbaeva Zhazira Muratbekovna	Candidate of Economic Sciences	Associate Professor	Satbayev University	
Izbairova Aliya Serikovna	Candidate of Technical Sciences, Associate Professor	Associate Professor	Satbayev University	
Kiseleva Olga Gennadievna	Candidate of Technical Sciences	Associate Professor	Satbayev University	
Employers:				
Tansykkozshin Aidos Dauletovich	-	General Director	LLP "ZhebeLogistics"	
Sharubekov Murat Nesipbekovich	Candidate of Technical Sciences	Advisor to the General Director	LLP "Azurit Railway Solutions"	
Students:				
Seidilda Shugyla	-	2nd-year student	Satbayev University	

Table of Contents

List of abbreviations and designations

EP - educational program
NRK - National Qualification Framework
IRK - Industry Qualification Framework
SDG - Sustainable Development Goals

1. Description of educational program

EP «7M11301-Transport services» was developed in accordance with the standards of postgraduate education. Upon completion of the program, undergraduates will be in-demand specialists in the transport services market.

The educational program is directly linked to several Sustainable Development Goals (SDGs), since transport plays a key role in the economy, social integration, and ecology. The main SDGs addressed by the EP 7M11301 “Transport Services” are:

SDG 4 – Quality Education. Training qualified specialists in the field of transport services expands access to modern knowledge, skills, and technologies, while also forming interdisciplinary competencies (logistics, IT, service, etc.).

SDG 8– Decent Work and Economic Growth. The development of transport services stimulates the economy, increases population mobility, and creates new jobs. The program prepares specialists for employment in transportation, logistics, and service sectors.

SDG 9 – Industry, Innovation, and Infrastructure. Transport services are closely connected with the development of modern infrastructure and the implementation of innovations (digitalization, intelligent transport systems, IT in transport and logistics). The program emphasizes sustainable and intelligent transport solutions that ensure transport process safety.

SDG 11 – Sustainable Cities and Communities. Transport is a key element of sustainable urban mobility. Training specialists in transport services contributes to the development of environmentally friendly, safe, and accessible transportation, while reducing congestion and harmful emissions.

SDG 12 – Responsible Consumption and Production. The curriculum includes issues of optimizing transport and logistics processes, energy efficiency, and the environmental friendliness of transport services.

SDG 13 – Climate Action. The program addresses reducing the carbon footprint of transport, as well as developing vehicles and transport technologies powered by alternative fuels.

Objects of professional activity include:

Organizations and enterprises of public transport engaged in passenger, cargo, baggage, and freight transportation, provision of infrastructure, loading and unloading operations, regardless of their ownership or legal forms;

Traffic safety departments of state and private transport enterprises;

Logistics departments of industrial and commercial organizations;

State transport inspection services, marketing services, and departments responsible for studying and servicing the transport services market;

Production and distribution systems, organizations, and enterprises providing information support for production and technological systems;

Research and design organizations engaged in the development of transport and logistics services, organization, and traffic safety;

Educational institutions implementing basic professional educational programs and vocational training pr

2. Purpose and objectives of educational program

Purpose of EP: Training of qualified scientific and pedagogical personnel in the field of transport services, capable of solving scientific and practical problems in professional activities and making managerial decisions using innovative technologies.

Tasks of EP:

- organization of the educational process corresponding to the international standards of postgraduate education for the educational process;
- training of scientific personnel with the competencies of a competitive specialist in the field of transport services;
- creating conditions for academic mobility of undergraduates;
- providing students with access to the advanced achievements of scientific and practical thought in the field of transport services;
- formation of modern specialists capable of strategic forecasting of transport processes, both national and international scale.

- training graduates capable of carrying out controlling of logistics processes, analyzing and assessing logistics risks, and making appropriate decisions to prevent and mitigate them;
- training graduates capable of ensuring the development of the transport industry through innovations, digitalization, and sustainable solutions in line with the SDGs.

3. Requirements for evaluating the educational program learning outcomes

The educational program has been developed in accordance with the State Compulsory Standards of Higher and Postgraduate Education, approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022, No. 2 (registered in the State Register of Regulatory Legal Acts under No. 28916), and reflects the learning outcomes on the basis of which curricula are developed (working curricula, individual study plans of students) as well as course syllabi.

Assessment of learning outcomes is carried out using specially developed test assignments within the framework of the educational program in accordance with the requirements of the State Compulsory Standard of Higher and Postgraduate Education.

When assessing learning outcomes, equal conditions and opportunities are provided for students to demonstrate their level of knowledge, skills, and competencies.

4. Passport of educational program

4.1. General information

№	Field name	Comments
1	Code and classification of the field of education	7M11 Services
2	Code and classification of training directions	7M113 Transport services
3	Educational program group	M151 Transport services
4	Educational program name	7M11301 Transport services
5	Short description of educational program	EP «7M11301-Transport services» was developed in accordance with the standards of postgraduate education. Upon completion of the program, undergraduates will be in-demand specialists in the transport services market.
6	Purpose of EP	Training of qualified scientific and pedagogical personnel in the field of transport services, capable of solving scientific and practical problems in professional activities and making managerial decisions using innovative technologies.
7	Type of EP	New EP
8	The level based on NQF	7
9	The level based on IQF	7
10	Distinctive features of EP	No
11	List of competencies of educational program	- the ability to identify patterns and trends in the development of scientific thought based on the synthesis of disciplinary and interdisciplinary areas for conducting complex research; - the ability to apply scientific approaches, knowledge and ideas in the field of transport systems based on the use of research results, modern methodology, trends in their development; - have the skills to develop functional systems for the implementation of investment projects in transport systems; - the ability to apply new tools to ensure the transparency of supply chains and analytical solutions and technologies to facilitate the automation of processes and improve the operational efficiency of industrial companies; - the ability to systematically and differentially use the tools of economic, mathematical, statistical and other

		methods to solve various theoretical and practical problems in the design.
12	Learning outcomes of educational program	1. Knows the technical characteristics and features of vehicles, machinery and equipment for research. 2.Uses methods of mathematical and simulation modeling, technology of business games for making optimal decisions in studies of transport and logistics processes. 3. Conducts research on transport and logistics facilities and processes, evaluates the results of analysis and reasonably make sscientific decisions. 4. Applies automatic design programs for the design of transport facilities and tools in research projects. 5. Uses modern transport technologies and equipment to carry out design and calculation tasks for transport facilities. 6. Applies fundamental and applied knowledge in a practical environment in the study of transport, transport services and logistics functions 7. Applies methods in the field of psychology and pedagogy and legal norms of intellectual property protection in scientific, pedagogical and research activities, has a philosophical outlook. 8. Applies new innovative technologies in the management of transport processes and services in order to ensure the safety of the provision of transport services, increase the efficiency of use of material, technical, financial and information resources. 9. Solves the tasks of designing transport networks and sustainable transport and logistics infrastructure using information technology and in accordance with the goals of sustainable development. 10. Finds relevant information in English to identify and analyze problems, conduct scientific research in the scientific field 11. Develops individual stages of technological processes to ensure the safety of personnel, the transportation process, the operation of vehicles and the movement of material flow in the supply chain. 12. Applies research methods and

		sustainable development strategies to conduct research in their professional activities, identify problems in the field of sustainable logistics, transport and transport services management. 13. Develops complex tasks in the field of transport infrastructure, supply chain, interaction of different modes of transport, transport along international transport corridors, selects and evaluates the necessary information to solve the tasks set.
13	Education form	full-time
14	Period of training	2
15	Amount of credits	120
16	Languages of instruction	russian, kazakh, english
17	Academic degree awarded	Master
18	Developer(s) and authors	Mukhanova Gulmira Samudinovna, Imasheva Gulnar Mahmutovna

4.2. Relationship between the achievability of the formed learning outcomes based on educational program and academic disciplines

№	Discipline name	Short description of discipline	Amount of credits	Generated learning outcomes (codes)												
				PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PO1 3
Cycle of basic education disciplines University component																
1	Foreign language (professional)	The course is aimed at studying the main problems of scientific knowledge in the context of its historical development and philosophical understanding, the evolution of scientific theories, principles and methods of scientific research in the historical construction of scientific paintings of the world. The discipline will help to master the skills of developing critical and constructive scientific thinking based on research on the history and philosophy of science. At the end of the course, undergraduates will learn to analyze the ideological and methodological problems of science and engineering and technical activities in building Kazakhstan's science and the prospects for its development.	3										v			

2	History and philosophy of science	Purpose: to explore the history and philosophy of science as a system of concepts of global and Kazakh science. Content: the subject of philosophy of science, dynamics of science, the main stages of the historical development of science, features of classical science, non-classical and post-non-classical science, philosophy of mathematics, physics, engineering and technology, specifics of engineering sciences, ethics of science, social and moral responsibility of a scientist and engineer.	3							v						
3	Higher school pedagogy	The course is aimed at mastering the methodological and theoretical foundations of higher education pedagogy. The discipline will help to master the skills of modern pedagogical technologies, technologies of pedagogical design, organization and control in higher education, skills of communicative competence. At the end of the course, undergraduates learn how to organize and conduct various forms of organizing training, apply active teaching	3							v						

		methods, and select the content of training sessions. Organize the educational process on the basis of credit technology of education.														
4	Psychology of management	The course is aimed at mastering the tools for effective employee management, based on knowledge of the psychological mechanisms of the manager's activity. Discipline will help you master the skills of making decisions, creating a favorable psychological climate, motivating employees, setting goals, building a team and communicating with employees. At the end of the course, undergraduates will learn how to resolve managerial conflicts, create their own image, analyze situations in the field of managerial activity, as well as negotiate, be stress-resistant and effective leaders.	3							v						
Cycle of basic disciplines Component of choice																
5	Automated systems for solving logistics problems	The purpose of the discipline is the acquisition of skills for solving logistics problems by undergraduates using	5			v	v				v	v				

		automated systems.. Specialized logistics company management software. Features of the implementation of the KANBAN system. MySAP Buisness Suite e-business platform. Integrated SAP NetWeaver integration platform. Logistics software based on the SAP platform. Automated SAP platform technologies for Supply Chain Management (SCM) and Customer Ralationship Management (CRM).														
6	Analysis and forecasting of traffic flows	Purpose: To provide comprehensive theoretical knowledge of the fundamentals of transport flow and system analysis and forecasting. Content: Graduate students will study the main characteristics of transport systems and freight flows, existing approaches to transport flow analysis, models and methods for analyzing and forecasting transport flows, as well as time series and forecasting methods in research. Upon completion of the course, graduate students will be able	5		v	v										

		to analyze and forecast the movement of transport flows, apply quantitative and qualitative forecasting methods, and determine transport system indicators for analysis.														
7	Information support systems for design, manufacture and maintenance of ground transport and technological machines	Purpose: formation of theoretical and practical knowledge about information systems for technological processes in the field of design, manufacture and maintenance of ground transport and technological machines. Contents: Existing information systems for the design, production and operation of machinery and equipment, information model of the life cycle of mechanical engineering products, information technology CALS, prospects for the development of information technology in the production and operation of transport and technological machines and complexes.	5				v				v	v				
8	Sustainable development strategies	Purpose: To train graduate students in sustainable development strategies to achieve a balance between economic growth, social	5												v	

		responsibility, and environmental protection. Content: Graduate students will study the concepts and principles of sustainable development, the development and implementation of sustainable development strategies, the evaluation of their effectiveness, and international standards and best practices. Cases and examples of successful sustainable development strategies are included.														
9	Research methods	The course is aimed at studying the laws, principles, concepts, terminology, content, specific features of the organization and management of scientific research using modern methods of scientometry. In the course of training, undergraduates will be able to choose methods of planning and organizing scientific research. They will study and master the mechanism of scientific search, analysis, conducting experiments, organizing surveys, compiling questionnaires, standards and regulations for the registration	5						**v**						**v**	

		of research results. Gain skills in the preparation and execution of documents for scientific projects, reports, publications for seminars and conferences.														
10	Intellectual property and research	The purpose of this course is to provide undergraduates with the knowledge and skills necessary to understand, protect and manage intellectual property (IP) in the context of scientific research and innovation. The course is aimed at training specialists who can effectively work with IP, protect the results of scientific research and apply them in practice.	5			v				v						
11	Modern problems of transport science, engineering and technology	Purpose: formation of knowledge of the fundamentals of the conceptual apparatus of transport science, technology and technology from the point of view of modern processes of functioning and interaction of various organizational and production structures. Content: patterns, forms and technologies of cognitive activity. The basic concepts of the stages and forms of development of scientific	5		v			v								

		knowledge. Stages of technical progress; development of transport science. The role of technology and technology in the development of modern society and the ability to use them in practice.														
12	Theory of transport processes and systems	The discipline will be studied. The classification of traffic. Features of the transport sphere of material production. Transport processes. Measuring instruments of transportation process. transport process cycle. The main technical and operational parameters of the transport process. Functional motor systems delivery. Modeling of the transport network. The concept of the graph. Model transport network.	5		v			v					v			
Cycle of profile disciplines University component																
13	International transportation corridors	The following are the most important aspects of KCM: KCM, KCM logistics infrastructure and innovative logistics technology. The following topics: KKM: Kizmetty taldau, problems and perspectives. BCC is an important aspect. It is	5											v		

		necessary to use intermodal and multimodal technologies. Doing so may cause damage to the logistics infrastructure. KKM and KR. doing so may result in damage to the economy. Doing so may cause the student to fall asleep or to fall asleep, and may result in fire or electric shock.														
14	Logistic tasks modeling	The aim of the discipline is to form a theoretical basis of master students' knowledge of models and methods of mathematical and simulation modelling. After completing the course a Master student should know the stages of modelling, mathematical methods of solving problems in logistics, the basics of conceptual and simulation modelling; be able to build mathematical models of logistics problems, determine the methods of their solutions and find optimal solutions. Content of the discipline: Mathematical models and methods in logistics processes. Economic-mathematical models and methods of solving problems in the management of production,	5		v											

		transport and logistics processes, processes of storage, distribution of resources and product sales. Theoretical foundations and methods of solving applied problems in logistics and organization of transport services. Stages of simulation modelling. Building a conceptual model.														
15	Modern transportation technologies in supply chains	Information means of transport control. Extensive and intensive development in the field of logistics. Indicators for assessing the technological resource of a country or enterprise. Investing in innovation. Technique and technology of logistics. Characteristics and basic directions of the development of science. Application of scientific achievements in logistics - nanotechnology, control systems with artificial intelligence, new means of communication and energy transfer. Prediction of the development of logistics infrastructure.	5	v				v			v					
16	Strategic logistics cost management	The purpose of the discipline is to study the content of	5								v					

		logistics costs and ways to reduce them to increase the company's competitiveness. After completing the course, the undergraduate must know the content of logistics costs and their classification; be able to keep track of logistics costs; have the skills to make decisions to reduce logistics costs. Discipline content: Information on the qualitative and quantitative content of logistics costs. Types of classification of logistics costs. Division of logistics costs according to the areas of activity of the enterprise. Complete and abbreviated cost accounting. Cost accounting in space and time. The reliability of the information base. Planning, accounting and opportunities to reduce logistics costs. Strategic management of logistics costs as a means of increasing the competitiveness of an enterprise. Accounting for logistics costs by function: a) management, b) transportation, c) maintenance and maintenance of stocks at procurement and storage,														

		production and sales and distribution stages. Forecast of sales volume using mathematical and statistical methods, taking into account the inflation factor. Construction of a regression-correlation model of the dependence of sales volume and costs of management, transportation, maintenance and maintenance of stocks. Determination of the total reduced costs and the minimum value of the total costs.														
Cycle of profile disciplines Component of choice																
17	Innovative Technology in Logistics	The purpose of the discipline is to study modern technologies in logistics for use in professional activities. Logistics is a methodological basis for the integration of information in supply chain management processes. The digital economy is the new global paradigm for managing economic processes. Changes in logistics under the influence of the digital economy. Digital Logistics. Concepts, terms and definitions of digital logistics. Logistics and building a	5								**v**					

		unified information environment in supply chain management processes. Regulatory aspects of digital logistics. Paperless electronic document management in logistics. Digital transformation, reengineering and logistics. “Cross-cutting” technologies of digital logistics: the use of distributed registry technologies (“blockchain”) in the management of supply chain logistics; BigDat technologies in logistics; global navigation, satellite communications and on-board supply control systems in logistics; bar and radio frequency (RFID) identification; “Internet of things” in logistics; artificial intelligence, robotics, unmanned vehicles, intelligent information control systems in logistics. Virtual logistics operator and cloud information technology.															
18	Research methodology for the market of transport and logistics services	The purpose of the discipline is the formation of undergraduate skills in conducting research on the market of logistics services based on knowledge of	5		v	v		v									

		methodological foundations. After completing the course, the undergraduate must know the principles, stages and methodology of the study; be able to apply the methodological foundations of the study of the market of transport and logistics services in professional activities. The content of the discipline: the current state of the world market of transport and logistics services. Problems and existing solutions. Technique and methods of research of the market of transport services. Improving the market of transport and logistics services in the Republic of Kazakhstan. Value Added Services.														
19	Supply Chain Modeling	The purpose of the discipline is the formation of undergraduate skills in building conceptual and simulation models of logistics processes and supply chains. After completing the course, the undergraduate should know the stages of building conceptual and simulation models, simulation modeling methods; possess the skills of	5		v					v					

		working in the environment of the AnyLogic simulation package, building simulation models, conducting experiments, processing the results of experiments, making optimal decisions. The content of the discipline: basic concepts and principles of modeling production and logistics processes. The basic concepts of simulation and the construction of a conceptual model. The method of discrete event (process) modeling. Software for modeling in production and logistics. Building simulation models in Anylogic simulation environment. Conducting experiments. Processing of the results of the experiment.															
20	Fundamentals of technical systems performance	Features of the management of technical systems. Fundamentals of industrial operation and maintenance of technical systems of the industry. Reasons for reducing the operability of machines in operation. The effect of lubricants on machine performance. Fatigue of materials of machine elements. Corrosion damage	5	v				v									

		to machine parts. The program for ensuring the operability of technical systems. Fundamentals of the concept of "life cycle of technical systems." Performance assessment of machine elements. The performance of the main elements of technical systems.														
21	Design and management of logistics infrastructure	The content of the discipline: Concepts of the logistics infrastructure, warehousing, storage systems. The basic principles and methods of designing and managing a logistics infrastructure. Modern concepts of an integrated approach to the formation and management of the logistics infrastructure at all levels of decision making. Resource optimization related to the design and operation of the logistics infrastructure. Information management system for the management of logistics infrastructure. Cost structure for the maintenance of logistics infrastructure	5				v					v				
22	Automation systems for road transport	Purpose: implementation of the mathematical apparatus and theoretical schemes, the introduction and study of	5	v				v			v					

		various modes in the management system; work with the main means of computer equipment and information technologies. Coordination: connection and role of the system of automation in the organization of transport services; attention and vision of the system and means of communication in transport, their characteristics; the sphere of application of different systems of communication in transport; as a tool for optimizing processes in transport systems: structure and levels of transportation of passes, their functions.														
23	The current state of interaction of all types of transport	The purpose of the discipline is the formation of undergraduate skills in organizing the effective interaction of various types of transport based on the knowledge of their technical and operational characteristics. After completing the course, the undergraduate should know the methods and modern technologies of transportation by various modes of transport;	5								v					

		possess the skills of organizing the transportation process with the participation of various modes of transport; be able to carry out economic calculations of the assessment of the transportation process. Content of the discipline: Functioning of main modes of transport. Interaction of modes of transport in the transportation process, at the points of cargo transshipment, transfer of passengers and in mixed direct transportation. An integrated approach to the organization of transportation on all modes of transport. The choice of the optimal transportation option, methods of interaction between modes of transport. Technical, technological, legal, economic and information spheres of interaction between different modes of transport. Modern technologies of transportation on various modes of transport. Economic models in the calculation of the assessment of optimal options for the transportation of goods and the infrastructure of transshipment points.														

24	Technical means of the transport system	Purpose: formation of knowledge about the object of management focused on road transport. Contents: general information from the theory of systems; freight and passenger transportation; freight science; freight forwarding services; general course of transport, etc.	5	v				v						v		
25	Technological equipment and production and technical infrastructure of enterprises	Technological equipment - an integral part of the PTB of automobile transport enterprises. Lifting and disassembling equipment. Control and diagnostic equipment. Washing and lubricating equipment. Equipment for body repair, paint work. Equipment for maintenance and repair of wheels. The choice of the acquisition and installation of technological equipment. Technical operation of technological equipment. Repair of technological equipment. Metrological and environmental support of process equipment. Trends in the improvement of technological equipment designs.	5	v				v								

26	Sustainable logistics and transport	The purpose of the discipline is to study the direction of research on the creation of a sustainable logistics system and supply chain. After completing the course, the undergraduate should know the basic concepts and principles of a sustainable logistics system; be able to identify problems in the functioning of logistics systems in the field of "Green Logistics"; have the skills to build sustainable logistics systems and supply chains. Discipline content: Applied aspects of sustainable logistics, supply chain and transport. Analysis of the impact of environmental decisions on logistics systems and transport. Sustainable logistics, closed supply chains, reverse logistics. Sustainable Supply Chain Strategy.	5													**v**	

5. Curriculum of educational program

NON-PROFIT JOINT STOCK COMPANY
"KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY NAMED AFTER K.I. SATBAYEV"

SATBAYEV UNIVERSITY

«APPROVED»
Decision of the Academic Council
NPJSC «KazNRTU
named after K.Satbayev»
dated 06.03.2025 Minutes № 10

WORKING CURRICULUM

Academic year	**2025-2026 (Autumn, Spring)**
Group of educational programs	**M151 - "Transport services"**
Educational program	**7M11301 - "Transport services"**
The awarded academic degree	**Master of Sciences**
Form and duration of study	**full time (scientific and pedagogical track) - 2 years**

Discipline code	Name of disciplines	Block	Cycle	Total ECTS credits	Total hours	lek/lab/pr Contact hours	in hours SIS (including TSIS)	Form of control	Allocation of face-to-face training based on courses and semesters				Prerequisites
									1 course		2 course		
									1 sem	2 sem	3 sem	4 sem	
CYCLE OF GENERAL EDUCATION DISCIPLINES (GED)													
CYCLE OF BASIC DISCIPLINES (BD)													
M-1. Module of basic training (university component)													
LNG213	Foreign language (professional)		BD, UC	3	90	0/0/30	60	E	3				
HUM214	Psychology of management		BD, UC	3	90	15/0/15	60	E	3				
LOG201	Theory of transport processes and systems	1	BD, CCH	5	150	30/0/15	105	E	5				
TRA203	Modern problems of transport science, engineering and technology	1	BD, CCH	5	150	30/0/15	105	E	5				
TRA206	Automated systems for solving logistics problems	2	BD, CCH	5	150	30/15/0	105	E	5				
LOG224	Research methods	2	BD, CCH	5	150	30/0/15	105	E	5				
MNG781	Intellectual property and research	2	BD, CCH	5	150	30/0/15	105	E	5				
HUM212	History and philosophy of science		BD, UC	3	90	15/0/15	60	E		3			
HUM213	Higher school pedagogy		BD, UC	3	90	15/0/15	60	E		3			
LOG200	Analysis and forecasting of traffic flows	1	BD, CCH	5	150	30/15/0	105	E			5		
TRA205	Information support systems for design, manufacture and maintenance of ground transport and technological machines	1	BD, CCH	5	150	30/15/0	105	E			5		
MNG782	Sustainable development strategies	1	BD, CCH	5	150	30/0/15	105	E			5		
M-3. Practice-oriented module													
AAP273	Pedagogical practice		BD, UC	8				R			8		
CYCLE OF PROFILE DISCIPLINES (PD)													
M-2. Module of professional activity (university component, component of choice)													
LOG234	International transportation corridors		PD, UC	5	150	30/0/15	105	E	5				
TRA214	Modern transportation technologies in supply chains		PD, UC	5	150	30/0/15	105	E	5				
TRA222	Sustainable logistics and transport		PD, UC	5	150	30/0/15	105	E		5			
TRA243	Strategic logistics cost management		PD, UC	5	150	30/0/15	105	E		5			
LOG206	Research methodology for the market of transport and logistics services	1	PD, CCH	5	150	30/0/15	105	E		5			
TRA217	Technical means of the transport system	1	PD, CCH	5	150	30/0/15	105	E		5			
LOG223	The current state of interaction of all types of transport	2	PD, CCH	5	150	30/0/15	105	E		5			

TRA207	Automation systems for road transport	2	PD, CCH	5	150	30/0/15	105	E		5			
LOG204	Logistic tasks modeling	1	PD, CCH	5	150	30/15/0	105	E			5		
TRA210	Technological equipment and production and technical infrastructure of enterprises	1	PD, CCH	5	150	30/0/15	105	E			5		
TRA229	Design and management of logistics infrastructure	2	PD, CCH	5	150	30/0/15	105	E			5		
TRA213	Fundamentals of technical systems performance	2	PD, CCH	5	150	30/0/15	105	E			5		
TRA228	Innovative Technology in Logistics	3	PD, CCH	5	150	30/15/0	105	E			5		
LOG207	Supply Chain Modeling	3	PD, CCH	5	150	30/15/0	105	E			5		
M-3. Practice-oriented module													
AAP269	Research practice		PD, UC	8				R				8	
M-4. Experimental research module													
AAP268	Research work of a master's student, including internship and completion of a master's thesis		RWMS	4				R	4				
AAP268	Research work of a master's student, including internship and completion of a master's thesis		RWMS	4				R		4			
AAP251	Research work of a master's student, including internship and completion of a master's thesis		RWMS	2				R			2		
AAP255	Research work of a master's student, including internship and completion of a master's thesis		RWMS	14				R				14	
M-5. Module of final attestation													
ECA212	Registration and protection of the master thesis		FA	8								8	
Total based on UNIVERSITY:									30	30	30	30	
									60		**60**		

Number of credits for the entire period of study

Cycle code	Cycles of disciplines	Credits			
		Required component (RC)	University component (UC)	Component of choice (CCH)	Total
GED	Cycle of general education disciplines	0	0	0	0
BD	Cycle of basic disciplines	0	20	15	35
PD	Cycle of profile disciplines	0	28	25	53
Total for theoretical training:		**0**	**48**	**40**	**88**
RWMS	Research Work of Master's Student				24
ERWMS	Experimental Research Work of Master's Student				0
FA	Final attestation				8
TOTAL:					**120**

Decision of the Educational and Methodological Council of KazNRTU named after K.Satpayev. Minutes № 3 dated 20.12.2024

Decision of the Academic Council of the Institute. Minutes № 3 dated 29.11.2024

Signed:

Governing Board member - Vice-Rector for Academic Affairs — Uskenbayeva R. K.

Approved:

Vice Provost on academic development — Kalpeyeva Z. B.

Head of Department - Department of Educational Program Management and Academic-Methodological Work — Zhumagaliyeva A. S.

Supervisor - School of Transport Engineering and Logistics — Abdullayev S. C.

Department Chair - Logistics — Bektilevov A. IO.

Representative of the Academic Committee from Employers ____Acknowledged____ — Sharubekov M.