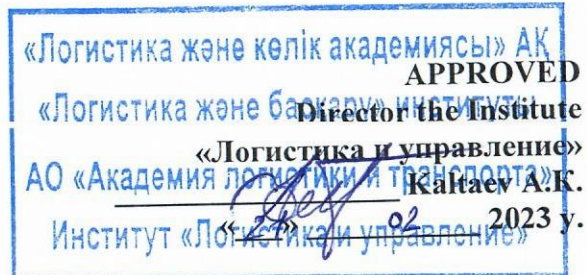
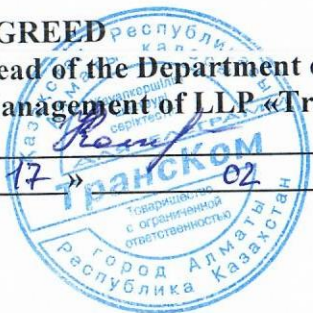


AGREED
Head of the Department of Dispatching and Transportation
Management of LLP «Transcom»

« 17 » 02 2023 y.
Kosybaev K.K.



CATALOG OF DISCIPLINES OF THE COMPONENT BY CHOICE

EDUCATIONAL PROGRAM

6B11326 - Organization of transportation, traffic and operation of transport

Level of training: Bachelor course

Period of study: 4 years

Year of admission: 2023 y.

Module	Cycle	Component	Name of the discipline	Total labor intensity		Semester	Learning outcome	Brief description of the discipline	Prerequisites	Post-requisites	Department
				in academic hours	in academic credits						
	1	2	3	4	5	6	7	8	9	10	
Module 1 - General Educational Competencies	GET	EC1	Scientific research methods	150	5	1	LO1, LO12	Giving students theoretical and applied knowledge of the methods of scientific research problems in the studied area, training specialists with skills of cognitive activity in science, the formation of deep ideas about the content of scientific activity, its methods and forms of knowledge.	Disciplines of the school component	Fundamentals of computer modeling, Railway design and maintenance	SHDaPE
	GET	EC1	Basics of law and anti-corruption culture	150	5	1	LO11, LO12	Increase public and individual legal awareness and legal culture of students, as well as the formation of knowledge and civic position on combating corruption as an anti-social phenomenon. As a result of studying the course students should master the fundamental concepts of law, the constitutional structure of the state power of the Republic of Kazakhstan, the rights and freedoms of citizens enshrined in the Constitution, the mechanism and protection of legitimate interests of a person in case of their violation.	Disciplines of the school component	Транспортное обеспечение международных перевозок, Правила перевозок грузов	SHDaPE

Module 2 – Economic and managerial competencies	GET	EC1	Basics of economics and entrepreneurship	150	5	1	LO3	Studies the activities of enterprises in various types of market, the model of equilibrium and functioning of the market, state regulation of prices and tariffs. Examines the concept of entrepreneurship and the limits of its legal regulation, conditions for the development of entrepreneurship, organizational and legal forms of doing business, business planning, business secrecy, social responsibility of entrepreneurship. Active teaching methods: case methods; business role-playing games, group work.	Disciplines of the school component	Managerial Economics / Time - management, Foreign economic activity in transport	TLM
	PD	EC11	Managerial Economics (Minor)	90	3	5	LO3	Formation of the conceptual apparatus and development of skills of economic analysis using modern models and patterns of economic science, consideration of economic problems and challenges facing the head of the firm. The study of this discipline will allow students to obtain and develop knowledge in the field of analytical research of economic, technological and technical parameters of the enterprise, as well as allow you to master the skills of using special methods of economic justification of management decisions and assessment of their consequences.	Basics of economics and entrepreneurship,	Logistics process management , Foreign economic activity in transport	TLM
	PD	EC11	Time - management (Minor)	90	3	5	LO3, LO11	Formation of students' general ideas about the essence and types of time management, principles and methods of time resource management for more successful implementation of professional activity.	Basics of economics and entrepreneurship	Foreign economic activity in transport	TLM
Module 2 – Economic and managerial competencies	PD	EC12	Logistics process management (Minor)	90	3	6	LO3, LO7	Manage traffic flows on all types of transport and optimize the routes of material flows, methods for determining and predicting all parameters of the functioning of networks. Students learn to reveal the essence of flow-forming factors, characteristics of the transport network, behavioral factors; to establish the relationship between the composition of traffic flows and output parameters; to study the forecasting of traffic network load; to develop skills for solving problems and analyzing transport networks. The method of training is the solution of cases.	Managerial Economics	Organization of work of operational personnel , Special conditions of cargo transportation, Final certification	TLM

Module 3 - Environmental competencies	GET	EC1	Ecology and life safety	150	5	1	LO2, LO10	The study of basic environmental concepts, environmental problems and approaches to their solution, sources and types of environmental pollution by enterprises, the principles of rationing the quality of atmospheric air and water, the main provisions of legislation in various fields, natural and man-made emergencies, their causes, methods of prevention and protection. Teaching methods - analysis of specific situations (case-study).	Disciplines of the school component	Ensuring traffic safety on transport, Transport security and train traffic control systems, Labor protection	MValS
Module 4 - Basic core competencies	BD	EC2	Rolling stock and train traction	180	6	4	LO4	The study of the design, principles of operation, classification and technical characteristics of railway rolling stock, the basics of train traction, the organization of operation and maintenance of rolling stock. Formation of skills for the effective use of technical equipment of rolling stock traction of railway trains, taking into account the amount of work, performance of traction calculations and calculation of indicators of the use of rolling stock. Within the framework of the discipline, the development of individual projects is implemented.	Transportation management on transport, Railway design and maintenance	Technology and control of the operation of railway sections and directions, Railway stations and junctions 1	RS
Module 4 - Basic core competencies	BD	EC2	Operation of urban transport	180	6	4	LO8	The study of the principles of the organization of urban transport, the requirements for the transportation of passengers, baggage, cargo and cargo, the planning of urban transport complexes and the parameters of the interaction of modes of transport in a single urban transport system. Formation of skills for determining indicators, analyzing the state of transport security of cities and regions, determining the need for the development of the transport network, rolling stock, organization and technology of transportation. Interactive teaching methods are used: work in small groups, discussions, guest lectures.	Design and maintenance of roadways	Пассажирский транспортный комплекс	OTaOT
Module 4 - Basic core competencies	BD	EC3	Transport and transfer hubs	180	6	4	LO7, LO8	Study of the principles of formation and development of transport and transfer hubs (TTHs) in cities and agglomerations, their purpose and classification, requirements for territories and objects of new passenger transport and transfer hubs, their arrangement and elements of planning organization. Formation of skills for the development of planning systems of transport hubs and assessment of the quality of service for passengers and visitors of the TTH. Within the framework of the discipline, students perform group tasks, work in small groups.	Design and maintenance of roadways	Technology and control of the operation of railway sections and directions, Prospects for the development of railway stations and junctions, Optimization of traffic flows	OTaOT

Module 4 - Basic core competencies	BD	EC7	Cargo management	180	6	3	LO5, LO8	Study of cargo properties and conditions of their transportation, cargo transport classification, factors affecting cargo, cargo transport characteristics affecting the organization of transportation, organization of measures to ensure safety during transportation and storage. Mastering the skills of cargo quality assessment and methods of determining the impact of cargo transport characteristics on the organization of transportation. Within the framework of the discipline, interactive teaching methods, the method of case tasks are used.	Transportation management on transport	Organization of cargo and commercial work, Transport and cargo systems, Transport support for international transportation, Special conditions of cargo transportation, Educational practice	OTaOT
	BD	EC7	Cargo packing service	180	6	3	LO5, LO8	Studying the properties of containers and packaging, based on the characteristics, operating conditions and manufacturing; familiarization with the types of materials for the production of containers and packaging; obtaining information about the environmental aspect of packaging, packaging safety (environmental requirements). Formation of ideas about the technology of cargo handling in the warehouse, used containers and packaging, packages, as well as labeling. Within the framework of the discipline, interactive teaching methods, the method of case tasks are used.	Transportation management on transport	Terminal transport systems, Foreign economic activity in transport, Industrial transport operation technology, Rules of cargo transportation	OTaOT
	BD	EC8	Passenger transport complex	180	6	5	LO4, LO7, LO8	The study of theoretical and practical provisions of the functioning of passenger complex systems, taking into account the interaction of various modes of transport and planning features of cities, agglomerations, regions. Consideration of issues related to the development of passenger transport infrastructure that meets modern requirements. Obtaining skills in organizing high-quality passenger service at transport facilities and monitoring the compliance of the quality of services provided with the established requirements. Within the framework of the discipline, classes are conducted with departure to the railway station complexes of Almaty-1, Almaty-2.	Organization and management of passenger transportation, Operation of urban transport	Organization and control of high-speed rail transport, Final certification	OTaOT
Module 5 - Profiling competencies	BD	EC3	Organization of operational work of the railway section	180	6	4	LO7, LO9	Study of the organization of the work of railway sections, dispatching personnel of railways, technical rationing of operational work and regulation of car traffic, locomotive and wagon fleets, rationing of work and rest of locomotive crews. Formation of skills for determining the operated fleet and calculating the operational indicators of the use of locomotives, operational planning of train and freight work of the road. As part of the discipline, demonstration of video clips is practiced, field classes are organized on the basis of the Almaty branch of the railway, Almaty-1, Almaty-2 stations.	Railway design and maintenance	Technology and control of the operation of railway sections and directions, Transport security and train traffic control systems	OTaOT

Module 5 - Profiling competencies	BD	EC4	Transport and cargo systems	180	6	5	LO5, LO8	Study of the principles of organization of transport and cargo systems on various types of transport with the use of modern and progressive technologies of cargo processing. Formation of skills for developing optimal schemes for loading and unloading operations and warehouse operations with various cargoes with the rational use of the material and technical base in the logistics chain of cargo delivery, as well as determining the storage conditions of various cargoes. The discipline provides for the execution of computational and graphical work.	Cargo management, Interaction of modes of transport, Educational practice	Organization of cargo and commercial work, Special conditions of cargo transportation	OTaOT
	BD	EC4	Terminal transport systems	180	6	5	LO5, LO8	Studies the basic principles of the formation, management and research of the effectiveness of terminal cargo transportation systems; simulation models used for the design of cargo transportation systems; terminal transport systems abroad. Formation of skills for modeling the processes of managing terminal transport systems and determining ways to improve the efficiency of transport and improve the service of cargo owners and the public. Within the framework of the discipline, discussions on problematic topics are held, and the protection of computational and graphical work is also performed.	Cargo packing service	Organization of cargo and commercial work, Industrial transport operation technology	OTaOT
	BD	EC8	Rules of cargo transportation	180	6	5	LO5, LO8	Study of the basics of cargo transportation planning in direct rail traffic, as well as export and import cargo, rules for receiving and issuing cargo, sealing wagons and containers, transportation of bulk cargo by routes, cargo with declared value. Obtaining skills in documenting the technology of transportation of various goods by rail. The training is conducted with elements of dual education on the basis of transport enterprises.	Basics of law and anti-corruption culture, Cargo packing service	Organization of cargo and commercial work, Final certification	OTaOT
	BD	EC10	Special conditions of cargo transportation	180	6	7	LO5, LO8	Study of the principles of organizing the transportation of perishable and dangerous goods in wagons and containers, taking into account the optimization of technical and technological processes of cargo delivery. Acquisition of skills to determine the most optimal schemes for carrying out loading and unloading and storage operations with perishable and dangerous goods, as well as the preparation of rolling stock. As part of the discipline, field classes are held at transport facilities.	Cargo management, Organization of cargo and commercial work, Transport and cargo systems, Transport support for international transportation, Logistics process management	Final certification	OTaOT

Module 5 - Profiling competencies	BD	EC10	Industrial transport operation technology	180	6	7	LO5, LO8	The study of the role of industrial transport in the process of public production, taking into account the interaction of industries and mainline transport, regulatory and legal interaction of industrial and mainline transport. Formation of planning and forecasting skills in industrial transport, development of a unified technological process of industrial and mainline railway transport. The discipline provides for the development of individual projects.	Cargo packing service, Terminal transport systems, Foreign economic activity in transport	Final certification	OTaOT
	BD	EC9	Transport security and train traffic control systems	180	6	8	LO2, LO10	Study of terms and definitions in the field of technical operation of transport and traffic safety, regulatory documents regulating the technical operation of transport and traffic safety, standards of technical operation on the device, maintenance and operation of technical means to ensure traffic safety. Acquisition of skills in determining permissible violations of traffic safety. As part of the study of the discipline, guest lectures are given by leading top managers of transport companies, solving and analyzing situational problems.	Organization and control of high-speed rail transport, Technical regulation of transportation by rail, Ecology and life safety, Ensuring traffic safety on transport, Labor protection, Railway stations and junctions 1, Organization of operational work of the railway section, Production practice1	Production practice2, Final certification	OTaOT
	BD	EC9	Prospects for the development of railway stations and junctions	180	6	8	LO4, LO6	Study of issues of ensuring the modern level of development of railway transport infrastructure in accordance with international standards. Application of innovative methods for calculating the technical equipment of stations, railway sections and junctions to ensure the specified and prospective dimensions of transportation, passage and processing of heavy freight and high-speed trains. Development of projects of stations and nodes according to rational schemes, their complex development taking into account the achievements of modern science, improvement of the technology of their work on the basis of automation and informatization of production processes.	Railway stations and junctions 1, Railway design and maintenance, Transport and transfer hubs	Final certification	OTaOT

Module 5 - Profiling competencies	PD	EC12	Optimization of traffic flows	90	3	6	LO7, LO10	Familiarization with modern problems of development of transport systems. The study of the principles of the organization of transportation by various modes of transport with their rational interaction, the optimal organization of traffic flows on the network (car traffic, passenger traffic, etc.). The formation of skills for optimal planning and promotion of traffic flows on the main network with unconditional safety of vehicles and creating conditions for the safe work of transport personnel. Within the framework of the discipline, the solution of practical tasks is provided.	Organization of operational work of the railway section,	Cargo Station Operation Management, Final certification	OTaOT
	PD	EC13	Organization of work of operational personnel	90	3	7	LO9, LO10	Formation of knowledge, skills and ideas in the field of theory and practice of organization, management and technology of train and shunting work at railway stations, sections, nodes and landfills of the railway network. Mastering the skills of engineering calculations and application in the production sphere, advanced methods of work of operational personnel for traffic management, development of technological processes for the functioning of transportation control centers. Within the framework of the discipline, work on training equipment is provided.	Logistics process management	Final certification	OTaOT
	PD	EC13	Cargo Station Operation Management	90	3	7	LO4, LO5	Formation of skills and abilities in the organization of the work of the cargo station, taking into account the optimal interaction of structural units to perform cargo and commercial work in accordance with regulatory indicators, ensuring the safety of transportation, the safety of cargo and rolling stock, minimum costs and effective use of technical means. Interactive teaching methods are used.	Optimization of traffic flows	Final certification	OTaOT

Acting Head of the Department
"Organization of transportation and operation of Transport"

Abibullaev S.Sh.