

CATALOG OF ELECTIVE DISCIPLINES

6B11 - Services

(Code and classification of the field of education)

6B113 - Transport services

(Code and classification of the direction of training)

1040

(Code in the International Standard Classification of Education)

B095 - Transport service

(Code and classification of the educational program group)

6B11303 - Logistics and organization of transportation

(Code and name of the educational program)

bachelor

(Level of preparation)

set of 2023

Developed

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Chairman of the Academic Council Oralkanova I.A.

Distribution logistics

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic concepts in the field of management of material and information flows, in accordance with the needs of the market at the stage of distribution (distribution) of finished products and the sale of goods through the retail network, the place and role of distribution in the enterprise, the formation of distribution channels and paths, the market relationship of intermediaries, the quality of service in distribution, as well as the organization of distribution networks of goods through sales representatives and other partner agents

Purpose of studying of the discipline

Formation of students` analytical thinking and practical skills in managing material flows and distribution of goods necessary in the practical work of a logistics manager.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Apply logistics knowledge to manage material flows and distribution of goods;*
- 2) Evaluate the efficiency of distribution networks, offer alternative solutions and optimal distribution options;*
- 3) Interact in distribution issues with partners, sales representatives, agents, etc.*

Prerequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Postrequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Corporate distribution

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basics and quality of distribution service at the enterprise, classification, types and models of distribution, product distribution schemes, formation of distribution channels and networks, distribution development schemes and strategies, operations and organization of physical distribution, as well as the role and importance of accounting and contractual units, physical distribution, coordination and integration of actions and relationships of logistics intermediaries with the use of Internet technologies

Purpose of studying of the discipline

Training of personnel for dealer networks based on the work of corporate structures and multinational companies

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Application of skills of preparation of documentation for participation in tenders and tenders for procurement within the framework of outsourcing of the company;*
- 2) Interact with the participants of the corporation`s distribution system within the framework of the company`s dealer networks;*
- 3) The use of effective communications in logistics networks and distribution centers.*

Prerequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Postrequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Distribution logistics at the enterprise

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the place and role of distribution in the enterprise, the organization of the distribution system, the formation of distribution channels and networks, taking into account the process of distribution of goods; logistics intermediaries in distribution, being a complex of interrelated functions implemented in the process of inventory sales among customers, applying the golden rules of physical distribution, coordination and integration of actions of logistics intermediaries and forms of logistics integration.

Purpose of studying of the discipline

Development of knowledge and skills of logistics and distribution organization at the enterprise.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Application and development of schemes for the organization of physical distribution of inventories and finished products;
- 2) Prepare documents on contract deliveries, storage of goods and material stocks;
- 3) Identify logistics intermediaries in the distribution network.

Prerequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Postrequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Business Ethics

Discipline cycle	Basic disciplines
Course	1
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic concepts, means, barriers of ethics of business communication; official business written speech; rhetoric and business rhetoric; ethics of public speaking, the culture of conducting business polemics, manipulation in business communication, as well as the image of a business person; it contains a set of moral norms, rules and ideas that regulate the behavior and attitudes of people in the process of their production activities; it is a special case of ethics and contains its main characteristics.

Purpose of studying of the discipline

Providing students with the basics of ethical knowledge in the field of business relations and teaching them modern practical principles of business ethics.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) To be guided in the theoretical and applied aspects of business ethics.
- 2) To implement comfortable psychological communication and a variety of strategies and tactics of business interactions.
- 3) Apply ethical principles to business situations.

Prerequisites

School course

Postrequisites

Commercial logistics Production process logistics Production logistics

Business ethics

Discipline cycle	Basic disciplines
Course	1
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline examines the introduction, definition, functions and principles of business and unethical Ethics in the corporate environment; changes in the business landscape, as well as business ethics as the basis of business power and stakeholders, including ethical issues in marketing; moral problems of business, ethics of the head and the organization's activities, business etiquette, ethics of behavior in the workplace, as well as ethics of conflict resolution

Purpose of studying of the discipline

Mastering scientific and applied knowledge in the field of business and professional ethics by students.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Understand the ethical-value and ethical-communicative foundations and problems of the business sphere of modern society.
- 2) Act in a conflict situation, overcome communication barriers, effectively apply psychological mechanisms of positive impact on business communication.
- 3) Organize and conduct business negotiations, public speeches and self-presentations.

Prerequisites

School course

Postrequisites

Commercial logistics Production process logistics Production logistics

Professional ethics

Discipline cycle	Basic disciplines
Course	1
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the relationship with etiquette, the basic concepts and principles of professional ethics that make up the image of a business person, the culture of conducting business polemics, the specifics of conducting business conversations, the main elements

of business etiquette, the organization of meetings and negotiations, as well as the essence, classification and functions of professional ethics, management ethics, ethics of business and services, the principles of professional etiquette, disputes and conflicts in professional activity

Purpose of studying of the discipline

Formation in students of a system of values, moral guidelines and rules of conduct necessary for the effective implementation of professional activities.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

ON 9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

1) Understand the role of ethical values and rules in modeling management decisions and in business communications of modern organizations.

2) Possess communication culture and conflictological competence.

3) Perform professional tasks in accordance with the norms of morality, professional ethics and official etiquette.

Prerequisites

School course

Postrequisites

Commercial logistics Production process logistics Production logistics

History of transport development

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the historical overview of the emergence and development by means of transport, specific features, characteristics of all types of transport, its importance for the socio-economic development of the Republic of Kazakhstan as a branch of production, as well as at the main stages of the development of the state, various ways of developing transportation in different countries, with an emphasis on urban transport, as well as new modes of transport and achievements scientific and technological progress in the field of transport.

Purpose of studying of the discipline

Students receive comprehensive knowledge on the history of transport development, as well as freight and passenger transportation by means of transport. In the process of studying the discipline, the student must distinguish between types of transport services and know the history of their development. Have an idea of the different ways of development of transportation in different countries and new modes of transport.

Learning Outcomes

ON4 Determine the type and purpose of the cargo, establishes a relationship with the modes of transport for transportation

Learning outcomes by discipline

1) To master the main historical events of the development of various modes of transport

2) Identify the advantages and disadvantages of each type of transport

3) Analyze situations concerning the development of transport in the Republic of Kazakhstan on the basis of cause- and-effect relationships

Prerequisites

Transport geography

Postrequisites

Cooperation of types of transport

The General course of the Railways

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies railway transport, tracks and track facilities, the plan and profile of the track, the structure of the roadbed and artificial structures, the upper structure of the track and the lower; dimensions; connections and intersections of tracks, rolling stock of railways, the construction and use of signaling devices, communications and automated systems, electrification, as well as types of stations depending on works performed; organization of train traffic and railway transportation

Purpose of studying of the discipline

The purpose of studying the discipline "General Course of Railways" is to form students' skills and abilities to analyze the work of the railway, to know the upper and lower structure of the track, the structure of the roadbed, to study the types of rolling stock, the work of traction rolling stock, electrification of railway tracks, to distinguish the types of stations depending on the work performed, to study the dimensions.

Learning Outcomes

ON4 Determine the type and purpose of the cargo, establishes a relationship with the modes of transport for transportation

Learning outcomes by discipline

1) Classify the main structures and devices of railways

2) To determine the impact of technical means and infrastructure on the overall performance of railways, on ensuring safety and meeting the train schedule

3) To search for information necessary for the effective performance of professional tasks

Prerequisites

Transport geography

Postrequisites

Cooperation of types of transport

Flat rate of transport

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies definitions that provide a comprehensive understanding of transport and consistency; terms related to the transport system in its current state, the role and meaning of modes of transport, types of transportation organization and features of various modes of transport included in the transport system, the main performance indicators, characteristics, problems and forms of interaction of various types of transport, taking into account the criteria for choosing types transport

Purpose of studying of the discipline

The purpose of teaching the discipline "General Course of Transport" is to form students` appropriate worldview and knowledge in the field of transportation, providing a comprehensive understanding of transport, the system, the importance and role of transport in modern society, modes of transport and their interrelationships, as well as operating conditions.

Learning Outcomes

ON4 Determine the type and purpose of the cargo, establishes a relationship with the modes of transport for transportation

Learning outcomes by discipline

- 1) To evaluate the features of the transport sphere of production, the classification of transport and communications, the main characteristics and features of modes of transport, the history of their development*
- 2) Describe the basic principles of the formation, functioning and development of transport processes, transport systems and the transport complex of the country*
- 3) Analyze technical and operational, economic and environmental indicators of the use of various modes of transport during transportation*

Prerequisites

Transport geography

Postrequisites

Cooperation of types of transport

Commercial logistics

Discipline cycle	Basic disciplines
Course	2
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the history of logistics development, the principle of building a logistics system as a type of economic logistics, taking into account managerial and technological aspects designed to minimize transport costs; the strategy and mission of commercial logistics, its concept and essence; the main objects of logistics management of procurement activities, production process, distribution and warehousing activities, as well as transport and logistics provision of logistics processes

Purpose of studying of the discipline

Formation of students` skills and knowledge in the field of commerce and logistics, management of trade flow processes, procurement, distribution

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) To form and use technical documentation (commodity, commercial, trade and technological, marketing, etc.) in the field of commerce and transportation processes;*
- 2) Plan purchases and sales of goods;*
- 3) Choose optimal logistics solutions and form logical networks in commercial organizations.*

Prerequisites

Business Ethics Professional ethics

Postrequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Production logistics

Discipline cycle	Basic disciplines
Course	2
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic definitions and concepts of logistics of production processes in the logistics management system, the logistics foundations of the organization and maintenance of production processes, the mission, functions, strategy and tactics of production logistics; methods of production logistics management in modern economic conditions, as well as logistics production

management using modern integrated management systems that help minimize costs at all stages of production

Purpose of studying of the discipline

To form the skills of production planning and management of production operations based on the methods of modern logistics

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Use modern production planning and logistics systems in ERP (Enterprise Resource Planning), MES (Manufacturing Execution Systems);
- 2) Create calendar plans for different types of production based on logistics methods;
- 3) Apply methods of optimization and integration of flow and material processes at the intra-shop and inter-shop levels.

Prerequisites

Business Ethics Business ethics Professional ethics

Postrequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Production process logistics

Discipline cycle	Basic disciplines
Course	2
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the conceptual and methodological foundations of logistics, the comparative characteristics of classical and systematic approaches to the formation of logistics systems on the example of the enterprises indicated by the teacher, taking into account the peculiarities of accounting for logistics costs, the qualitative and quantitative flexibility of production systems and the problems of accounting for costs in logistics, as well as the ordering of the movement of material flows and methods of reducing the cost of goods and services

Purpose of studying of the discipline

Development of systems thinking and skills in the organization of logistics of production processes

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Use tools to ensure production processes based on the methods of logistics of the enterprise.
- 2) Apply modern concepts of logistics of production processes based on the methods of "Kaizen", "Kanban", "Lean manufacturing", etc.
- 3) Analyze the flow and material processes in production, make suggestions for optimization and efficiency improvement

Prerequisites

Business Ethics Business ethics Professional ethics

Postrequisites

Operating and warehouse logistics Logistics of supply and distribution Warehousing logistics

Logistic of the system of international transport processes

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the main elements of the logistics market of cargo transportation and forwarding services, including multimodal and intermodal technologies for organizing the system of cargo and goods movement along the international transport corridor; the essence, factors and organizational aspects of the development of the logistics infrastructure of international logistics and transport corridors; features of the international infrastructure of various modes of transport and supply chains, as well as customs logistics

Purpose of studying of the discipline

The purpose of studying the discipline is to master students with theoretical and practical knowledge and skills for the formation and management of the logistics system of the organization within the framework of international economic activity

Learning Outcomes

ON5 Simulate production processes in transport to improve the productivity of transport and the quality of work in the organization of traffic

Learning outcomes by discipline

- 1) Organize multimodal transportation
- 2) Make management decisions in non-standard situations arising during cargo transportation
- 3) Use the procedure for building efficient transport and logistics systems

Prerequisites

Organization of transportations and management by motion

Postrequisites

Cooperation of types of transport

Organization of transport and logistics activities

Discipline cycle	Basic disciplines
Course	2

Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies definitions, concept, functions, essence, tasks, prerequisites and stages of logistics development; functional logistics relationship with finance, marketing and production planning; economic effect of logistics use; definition and types of material flow; logistics operations and logistics systems, properties of logistics systems; transport processes and logistics, solving transport problems, and also effective methods of managing the activities of logistics services

Purpose of studying of the discipline

The formation of students` clear scientific ideas and skills in managing material flows, the study of methods of effective delivery of goods and passengers.

Learning Outcomes

ON5 Simulate production processes in transport to improve the productivity of transport and the quality of work in the organization of traffic

Learning outcomes by discipline

- 1) Identify a logistical problem at a transport facility.*
- 2) Classify the main flow processes related to the transportation of products.*
- 3) To determine the specific features of material flows in the sphere of activity of enterprises.*

Prerequisites

Organization of transportations and management by motion

Postrequisites

Cooperation of types of transport

Transport-logistic infrastructure

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies operations related to the transportation of goods by various modes of transport: documentation of goods, loading, unloading and storage, terminal processing, provision and maintenance of vehicles for transportation, as well as its rational use; freight forwarding services in the organization and execution of which can be performed under concluded contracts with shippers (senders), consignees (recipients), infrastructure owners or carriers of third-party organizations

Purpose of studying of the discipline

The purpose of the discipline is to form students` knowledge in the field of logistics infrastructure of the enterprise and the state, develop skills and abilities in solving problems to justify the use of various elements of logistics infrastructure in transport systems.

Learning Outcomes

ON5 Simulate production processes in transport to improve the productivity of transport and the quality of work in the organization of traffic

Learning outcomes by discipline

- 1) Choose transport and technological schemes for the delivery of goods and passengers.*
- 2) To consider the studied transport object as a complex of interrelated parts united by a common goal, to reveal its integrative properties, as well as internal and external links.*
- 3) Define and describe the characteristics of the main elements of logistics.*

Prerequisites

Organization of transportations and management by motion

Postrequisites

Cooperation of types of transport

Warehousing logistics

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the warehouse system as an object of logistics of material flows, intra-production warehousing, warehouse as a complex of interrelated logistics operations, warehouse network and warehouse management, technology of warehouse logistics operations and their effectiveness, a set of tasks for the formation of a warehouse network, as well as the organization and management of the logistics process in the warehouse; organization and development of a network of transport and logistics centers in the region; principles of company selection

Purpose of studying of the discipline

Training in warehouse management skills, tracking the movement of goods, optimizing the cost of storing inventory

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) To select a warehouse in accordance with technical requirements and calculate the required areas;*
- 2) To calculate the costs of storage and handling of goods; to draw up a package of documents issued at the reception, storage, departure, inventory and loss of goods;*
- 3) Assessment of the need for warehouse space and technological layout of the warehouse*

Prerequisites

Commercial logistics Production process logistics Production logistics

Postrequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Logistics of supply and distribution

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the goals and objectives of logistics of supply and distribution as a functional area of integrated logistics, methods and evaluation of improving their efficiency, logistics management strategy of supply and distribution; mechanisms of procurement logistics, the evolution of relations with suppliers, organization and evaluation of the effectiveness of procurement activities, including the use of outsourcing methods of business processes in logistics of supply, distribution and sales.

Purpose of studying of the discipline

Training of students in the issues of supply, logistics of production and distribution (distribution).

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) To carry out end-to-end planning of the need for raw materials and materials based on sales plans and production specifications;*
- 2) Consolidate the supply of raw materials, materials, finished products to the participants of the logistics process and logistics networks;*
- 3) Apply the methods of integrated logistics in matters of supply and distribution.*

Prerequisites

Commercial logistics Production process logistics Production logistics

Postrequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Operating and warehouse logistics

Discipline cycle	Basic disciplines
Course	2
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the principles of integrated logistics management of the enterprise, the characteristics of production and warehouse logistics, the provision of flow processes based on modern Lean Production, Kanban, Just-in-Time systems, etc.; order fulfillment, transportation management, packaging, materials processing, warehouse management, inventory management and the design of a network of facilities, the use of a transport and warehouse system, as well as prospects for the development of production and warehouse logistics

Purpose of studying of the discipline

Development of knowledge and skills of management of production flow processes and warehousing system at the enterprise

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Apply methods of organization of intra-production processes and warehouse management of the enterprise*
- 2) Integrate modern technological solutions in the field of logistics and warehousing using the concept of "Industry 4.0"*
- 3) To create and propose ways of interaction of all participants in production, warehousing and deliveries according to the models "B2C", "B2B", etc.*

Prerequisites

Commercial logistics Production process logistics Production logistics

Postrequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Rules for the carriage of goods and passengers

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies ensuring full and timely satisfaction of the needs of the national economy and the country as a whole in the transportation of goods with the lowest transport costs, economically expedient distribution of cargo transportation by modes of transport, rational interaction of all types of transport over the periods of the year and the maximum reduction of unevenness of transportation, taking into account seasonal consumption of branches of the national economy.

Purpose of studying of the discipline

To give students a set of knowledge, skills and abilities on the basics and features of planning, methodology and organization according to the rules of passenger and cargo transportation

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Coordinate the work of various modes of transport in passenger transportation.
- 2) Plan the effective functioning of the transport complex due to well-established management of the transportation process.
- 3) To investigate cargo and passenger flows for plotting.

Prerequisites

Organization of transportations and management by motion

Postrequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery
technologies in transportation

New

Freight transportations

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the issues of the specifics of cargo transportation conditions, the guarantee of the integrity of cargo during transportation, loading and unloading and storage, transportation safety, technical and operational indicators, optimization of the operation of vehicles, as well as rational loading of rolling stock and warehouses, their effective use, including ensuring the safety of transported goods at all stages of the transportation process, taking into account for international transportation

Purpose of studying of the discipline

The purpose of teaching the discipline is to study the theoretical foundations and methods of organizing cargo delivery, acquiring practical skills in planning and managing the transport process.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Use theoretical approaches to the study of cargo flows, analysis of transport processes in order to optimize their parameters.
- 2) Process various transport and commercial documents.
- 3) Calculate the main indicators of transport efficiency.

Prerequisites

Organization of transportations and management by motion

Postrequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery
technologies in transportation

New

Passenger transportations

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the main provisions related to the transportation of passengers, baggage, the maintenance standards of ticket offices, auto, railway, air terminals, forecourts and the requirements imposed on them; reference and information services, the technological process of the station, the organization of passenger traffic and cultural and consumer services of passengers are studied, the basic concepts and provisions are highlighted international passenger transportation by type of transport

Purpose of studying of the discipline

The purpose of teaching the discipline is to study the theoretical foundations and methods of organizing the delivery of passengers, to acquire practical skills in planning and managing the transport process.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) To use theoretical approaches of passenger traffic research, analysis of transport processes in order to optimize their parameters.
- 2) Process various transport and commercial documents.
- 3) Calculate the main indicators of transport efficiency.

Prerequisites

Organization of transportations and management by motion

Postrequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery
technologies in transportation

New

Computer graphics are in a transport planning

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies preparation for working with AutoCAD and Kompas programs: hatching, entering point coordinates, building linear

and nonlinear basic primitives, typing, including methods and tools for editing solid objects, building 2-dimensional and 3-dimensional objects in AutoCAD and Kompas, which will allow you to independently apply this knowledge in the future various fields of modern activity

Purpose of studying of the discipline

To instill and consolidate the skills of performing various kinds of drawings in accordance with ESCD standards and to introduce modern methods of machine manufacturing (AutoCAD, Kompas Graph).

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Edit drawing elements, parameters for drawing up drawings and project specifications, program settings and saving the program document in various AutoCAD formats.
- 2) Design and create virtual computer frameworks, objects used in the design of engineering structures.
- 3) Demonstrate practical skills of computer-aided design of drawing works.

Prerequisites

Information and communication technology

Postrequisites

Information support of the transportation process Intelligent systems of transport management Automated control systems of transportation process

Machine graphic arts

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic concepts for familiarization with the automated development of drawing works; information about a personal computer and the AutoCAD and Kompas software package; commands for controlling the main functions of AutoCAD and Kompas; creating a drawing, its boundaries; hatching, saving a drawing, sizing, drawing design commands, drawings, as well as the use of software in the design of technological and design documentation

Purpose of studying of the discipline

To instill and consolidate the skills of performing various kinds of drawings in accordance with ESCD standards and to introduce modern methods of machine manufacturing (AutoCAD, Compass Graph).

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Use computer graphics software in the design of technological and design documentation.
- 2) Apply the skills of "reading" and executing drawings.
- 3) Draw up design documentation in accordance with the requirements of GOST using machine graphics.

Prerequisites

Information and communication technology

Postrequisites

Information support of the transportation process Intelligent systems of transport management Automated control systems of transportation process

Fundamentals of computer modeling

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the theory of system modeling, methods and principles of simulation and mathematical modeling of queuing systems, information flows, tools for project implementation, including working in the MathLab environment, working with files, editing documents, formatting objects, working with graphics, computing, data processing and statistics, methods of creating computer models, as well as programming in the MathLab environment for the purpose of conducting computer experiments

Purpose of studying of the discipline

Mastering the basics of modeling theory by students, acquiring skills in constructing mathematical models of various classes.

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Use information and communication technologies in professional activities
- 2) Be guided by the basic principles of structural and object-oriented programming
- 3) Apply skills in various fields of computer graphics (vector, pixel, 3d graphics)

Prerequisites

Information and communication technology

Postrequisites

Information support of the transportation process

Automated control systems of transportation process

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies automated control systems, their role in the transportation process; information support in transport management; types and characteristics of communication systems in transport, the use of various communication systems in traffic management; the use of information technology in the organization of transportation, maintenance of information flows in transport systems, in the organization of the relationship with the global data transmission system; structure and levels of construction of automated control systems in the transportation process

Purpose of studying of the discipline

The purpose of this course is the acquisition by students of theoretical knowledge and practical skills in the field of effective use of automated control systems, as well as advanced technologies in technological processes in transport and in road traffic, ensuring savings of labor and energy resources, and traffic safety in various operating conditions.

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Organize the work of individual transport facilities, taking into account the use of an automated control system
- 2) Use electronic computers for processing operational information
- 3) Use software to solve transport problems

Prerequisites

Information and communication technology

Postrequisites

Final examination

Intelligent systems of transport management

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the principles of building and forming information flows; general principles of building intelligent transport systems; routing of various types of transport and monitoring its operation when using intelligent transport systems; design of information management systems; organization of information exchange between transport management facilities, as well as information technologies in the design of vehicles to ensure traffic safety, taking into account world experience usage

Purpose of studying of the discipline

The purpose of this course is the acquisition by students of theoretical knowledge and practical skills in the field of effective use of automated control systems, as well as advanced technologies in technological processes in transport and in road traffic, ensuring savings of labor and energy resources, and traffic safety in various operating conditions.

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Use various digital means and sources of digital information coming from an intelligent transport system
- 2) Classify the features and principles of operation of intelligent transport systems
- 3) Analyze information flows in transport systems, their relationship with the global transmission system, storage and processing of information, algorithms for effective decision-making

Prerequisites

Information and communication technology

Postrequisites

Final examination

Information support of the transportation process

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic terms and concepts, classification and structure of information systems, modern problems of informatization in transport, automated enterprise management systems, concepts of informatization of transport and transport processes, information systems in transport management; data protection in electronic identification technologies; prospects for the development of new information technologies in transport, information systems in traffic management, ensuring traffic safety in different

operating conditions

Purpose of studying of the discipline

The purpose of this course is the acquisition by students of theoretical knowledge and practical skills in the field of effective use of automated control systems, as well as advanced technologies in technological processes in transport and in road traffic, providing savings of labor and energy resources, and traffic safety in various operating conditions.

Learning Outcomes

ON2 Conducts the process of processing information on a personal computer, performs input and output of information from data carriers, communication channels, use the multimedia capabilities of a personal computer in work

Learning outcomes by discipline

- 1) Develop data analysis and management tools for various types of activities using digital technologies.*
- 2) Apply software and hardware of computer systems and networks for data collection, transmission, processing and storage.*
- 3) Perform a description of the information objects of the transport structure, calculate the parameters of data structures and analyze their characteristics.*

Prerequisites

Information and communication technology

Postrequisites

Final examination

New technologies in transportation

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the historical aspects and properties of innovations in the transport sector, the increasing role in new technologies in the transportation process, the use of uniform transport documents, as well as trends in innovation in various sectors of transport; an economic and mathematical model for assessing the innovative potential of the transport industry and innovative transport technologies in the field of transportation, optimization of delivery and storage of goods, the use of unmanned technologies and augmented realities

Purpose of studying of the discipline

The aim is to study new technologies in transportation

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) Use new technologies for organizing the work of transport*
- 2) Develop projects for the implementation of: modern logistics systems and technologies for transport organizations, intermodal and multimodal transportation technologies, optimal routing*
- 3) To use new technologies and approaches to the organization of transport processes of both cargo and passengers, general patterns of formation of the concept of innovative projects*

Prerequisites

Rules for the carriage of goods and passengers Freight transportations Passenger transportations

Postrequisites

Innovative technologies of terminal cargo processing Terminal transportation technologies Modern technologies and devices for optimizing terminal activity

Modern logistics technologies for cargo and passenger delivery

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies modern logistics technologies for cargo and passenger delivery, including the basic principles of transportation process technology, modal transportation, terminal transportation, improvement of transportation process technology, selection of the optimal method of cargo and passenger delivery in multimodal transportation, concepts, principles, structure and types of modern transport and technological systems for cargo and passenger delivery, taking into account world experience in application of modern technologies

Purpose of studying of the discipline

The aim is to consider the types of transport technologies, methods of cargo transportation and the division of the transport process into its constituent operations, how to optimize the work of transport engaged in transportation within the framework of improving logistics.

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) Identify shortcomings and modernize technologies and systems to achieve the goal of improving the quality of service to users of transport services*
- 2) Conduct a technical and economic analysis, search for ways to reduce the cycle of work;*
- 3) Manage the stocks of cargo owners of the distribution transport network.*

Prerequisites

Rules for the carriage of goods and passengers Freight transportations Passenger transportations

Postrequisites

Innovative technologies of terminal cargo processing Terminal transportation technologies
technologies and devices for optimizing terminal activity

Modern

Modern technologies of cargo and passenger delivery

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the types and volumes of transportation of goods and passengers, cargo, cargo traffic, cargo turnover, passenger traffic, technical and operational indicators of the use of rolling stock in the transportation of goods and passengers, stages of transport support, the organization of the movement of rolling stock, as well as modern technologies for the delivery of goods and passengers, increasing the competitiveness of transport services, reducing the cost of transportation, increasing the speed and regularity of transportation

Purpose of studying of the discipline

The purpose is to consider modern technologies for the delivery of goods and passengers

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) To ensure the reception, placement, fastening and transportation of goods, as well as safe boarding, transportation and disembarkation of passengers.
- 2) To use in practice knowledge of the requirements of market conditions and modern achievements of science and technology, when developing measures to improve transport management systems aimed at organizing and effectively implementing various transport and technological schemes for the delivery of goods and passengers
- 3) To improve technological schemes of transportation organization

Prerequisites

Rules for the carriage of goods and passengers Freight transportations Passenger transportations

Postrequisites

Innovative technologies of terminal cargo processing Terminal transportation technologies
technologies and devices for optimizing terminal activity

Modern

Mathematical methods and models in logistics

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the optimization of network graphs of projects, methods for optimizing flows on networks and graphs in logistics research; procedures for optimizing supply chains based on methods and models of graph theory, methods for solving models of transport problems, the method of potentials, methods of mathematical theory of inventory management, the basics of the simulation method in logistics applications, probability theory in logistics, as well as application of mathematical models in logistics tasks

Purpose of studying of the discipline

The purpose of studying the discipline is to form students' knowledge, skills and abilities in the application of mathematical methods and models in logistics.

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Apply methods of mathematical analysis and modeling.
- 2) Apply mathematical methods to solve research practical problems.
- 3) Assess the need for resources and plan their use when solving tasks in professional activity.

Prerequisites

Mathematics

Postrequisites

Tariffs in the logistics system Economy in transport Economic processes in transport

Mathematical methods of decision of transport tasks

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basics of solving transport problems by the distribution method; the method of potentials; the method of the minimum element; planning of cargo transportation along delivery routes; the distribution problem and the assignment problem; the use

of economic and mathematical methods and a personal computer in transportation; the study of loaded modes of transport from the point of view of transportation, having a systematic understanding of transport services and transportation in general

Purpose of studying of the discipline

The purpose of studying the discipline is to study methods of solving transport problems

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Develop technological schemes for the organization of transportation and carry out calculations and analysis of the results obtained.
- 2) Use computer technology to improve the quality of the transportation process, reduce transportation costs and efficient use of labor and material resources.
- 3) Assess the need for resources and plan their use in solving tasks in professional activity.

Prerequisites

Mathematics

Postrequisites

Tariffs in the logistics system Economy in transport Economic processes in transport

Mathematical modeling of economic processes and systems

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the elements of the national economy, being the most important tool for the scientific study of economic processes: the economy of the region, the interaction of systems, macro- and microeconomic models, the study of the creation of tools that subsidize the researcher in mathematical modeling of economic processes, the study of transport models and methods of solving transport problems, modeling in the development of economic systems, as well as the study of the main directions of analysis of economic systems and processes

Purpose of studying of the discipline

Mastering by students of modern practical technologies of computer modeling of economic systems necessary for understanding cause- and- effect relationships in economics, forecasting, planning, decision-making and modern tools designed for engineering calculations, and visualization of the data obtained.

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Apply modeling methods in the study, design and operation of economic systems; develop schemes of modeling algorithms of processes and systems and implement them using application software packages.
- 2) Work with modern software used to calculate mathematical models of problems describing economic processes.
- 3) Assess the need for resources and plan their use in solving tasks in professional activity.

Prerequisites

Mathematics

Postrequisites

Tariffs in the logistics system Economy in transport Economic processes in transport

Optimization methods and operations research

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the correct formulation and solution of linear programming problems, graphical methods for solving linear programming problems, the dual linear programming problem, the transport problem, including the economic and mathematical model of the transport problem and its solution by the simplex method, integer programming, multi-criteria optimization problems, function optimization methods, nonlinear programming, penalty methods, as well as improving the optimal plan transportation

Purpose of studying of the discipline

The purpose is to familiarize with the practical application of methods of the most effective management of various organizational (including economic) systems in the transport process

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

ON 3 Use the basics of mathematical and economic knowledge to solve logistical problems

- 1) Determine the optimization parameters of logistics transport chains and links, taking into account the optimality criteria
- 2) To make effective decisions in the professional activities of specialists in the optimization of logistics processes of transport
- 3) Structure the applied optimization problem, choose a suitable mathematical model for its solution, make sure that the necessary initial information is available and find a solution method

Prerequisites

Cooperation of types of transport

Postrequisites

Assessment of the work and quality of transportation on transport Efficiency of road and transportation complex Quality assessment of

Optimization of transport logistics processes

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the essence and tasks of transport logistics: the main parameters affecting the optimization of logistics processes of transport activities, methods of optimizing transport, analysis of the organization of logistics processes of transport activities of enterprises of various types of transport, evaluation of the effectiveness of logistics processes of transport activities of enterprises, problems of organization of logistics processes of transport activities of enterprises, the use of economic and mathematical methods and personal computers in transportation organizations

Purpose of studying of the discipline

Formation of skills for future specialists to optimize logistics processes of transport

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Use the methodology of construction, analysis and application of mathematical models to assess the state and forecast the development of economic phenomena and processes*
- 2) To carry out the choice of the mode of transport and the rational allocation of resources between the interacting modes of transport*
- 3) To determine the parameters of optimization of transportation processes and links, taking into account the criteria of optimality*

Prerequisites

Cooperation of types of transport

Postrequisites

Assessment of the work and quality of transportation on transport Efficiency of road and transportation complex Quality assessment of freight and passenger transport

Optimization of transportation processes

Discipline cycle	Basic disciplines
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies optimal planning of cargo transportation along delivery routes, calculation of delivery routes for the transportation of small-batch goods (the task of the minimum objective function), the need and ways to optimize resources, optimization of logistics costs, the use of economic and mathematical methods and personal computers in the organization of transportation, focusing on software products for optimization (Maxoptra, 1C TMS Logistics, 4logist, etc.)

Purpose of studying of the discipline

The objectives of the discipline: to train students in the field of optimization theory for solving engineering problems; to give an idea of the principles and methods of mathematical modeling of operations; to introduce the main types of problems of operations research and methods of their solution for practical application.

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Identify technological links between elements of the transportation process*
- 2) To determine effective options for the transportation of goods and passengers in mixed traffic*
- 3) Apply methods to accelerate the turnover of wagons and cars by reducing empty flights and improving the use of their carrying capacity*

Prerequisites

Cooperation of types of transport

Postrequisites

Assessment of the work and quality of transportation on transport Efficiency of road and transportation complex Quality assessment of freight and passenger transport

Foreign trade operations and their transport support

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the concepts and classification and functions and participants of foreign economic relations and operations, international conventions and intergovernmental agreements, organization and technique of foreign trade, international and national regulation of foreign economic operations, customs regulation, foreign trade contract, its structure and content, as well as general factors of development of foreign economic activity and its development in the regions, taking into account the movement of goods

Purpose of studying of the discipline

To reveal the content of relations, relations, operations and other issues taking place in international trade between cargo owners and

owners of vehicles, between trade and transport

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Apply knowledge of the peculiarities of cargo transportation with the use of various types of transport;
- 2) Plan the distribution of cargo in the conditions of multimodal transportation;
- 3) Draw up documentation related to transportation and support of foreign trade operations.

Prerequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Postrequisites

Logistics strategies and innovation Innovative directions in professional activity Personnel management

Global logistics and SCM

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the logistics activities of multinational companies, transport in supply chains, export and import operations and the role of government in these processes, international transport systems, inventory management and customs clearance, global sourcing, service and placement of facilities, integration of multimodal systems and global projects, information flow and movement of finance in supply chains, reverse logistics, scientific applied management in the development of supply chains

Purpose of studying of the discipline

Developing an understanding of the logistics activities of multinational companies, supply chain strategies, export and import operations

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Apply knowledge of the design of export-import documentation, use INCOTERMS
- 2) To solve management tasks related to operations on world markets in the context of globalization
- 3) Determine the impact of multiculturalism on business processes in global logistics and supply chain management

Prerequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Postrequisites

Logistics strategies and innovation Innovative directions in professional activity Personnel management

Supply chain planning and management

Discipline cycle	Profiling discipline
Course	3
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the formation and integration of supply chains, basic operations in supply chains, strategic solutions insourcing / outsourcing in supply chains, dislocation of logistics and production facilities, optimization of transportation in supply chains, optimization of the configuration of the network structure of supply chains, operational strategy of supply chains, supply chain management system, as well as logistics performance indicators, taking into account their methods and use

Purpose of studying of the discipline

Formation of students` stable understanding of the basic concepts and patterns of integration of key business processes in supply chains, concepts and approaches to supply chain management

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Apply modern supply chain management concepts;
- 2) Use effective methods of communication and supply chain planning;
- 3) Solve problems of optimization of transportation processes and supply chain management

Prerequisites

Distribution logistics Corporate distribution Distribution logistics at the enterprise

Postrequisites

Logistics strategies and innovation Innovative directions in professional activity Personnel management

Quality assessment of freight and passenger transport

Discipline cycle	Profiling discipline
Course	4
Credits count	6

Knowledge control form

Examination

Short description of discipline

The discipline studies the quality management of freight and passenger transportation: analysis and selection of methods for assessing the quality of transportation, admission of kazakhstani carriers to international transportation, freight and passenger tariffs of various modes of transport, methods of calculating freight payments by modes of transport, the system of payment for baggage and travel, control and accounting of cargo and passenger transportation

Purpose of studying of the discipline

The purpose of studying the discipline "Assessment of the quality of freight and passenger transportation" is to develop various measures (control actions) that affect the transportation process.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) To calculate quantitative and qualitative indicators of transport performance for decision-making in the field of professional activity*
- 2) Develop and evaluate measures to improve the quality of transportation*
- 3) Develop unified systems of transport performance indicators*

Prerequisites

Optimization of transport logistics processes Optimization methods and operations research Optimization of transportation processes

Postrequisites

Final examination

Assessment of the work and quality of transportation on transport

Discipline cycle Profiling discipline

Course 4

Credits count 6

Knowledge control form Examination

Short description of discipline

The discipline studies the state of the modern transport services market: analysis of assessment methods and indicators of transport quality, transport quality management, quality indicators, their calculation and rationing, modern methodologies for assessing the quality of transport, methods for assessing the quality of transport services, calculated and expert indicators, integral quality indicator, comprehensive assessment, quality of logistics service orders, as well as features of the assessment of transport services

Purpose of studying of the discipline

The purpose of studying the discipline is to study methods of assessing the work and quality of transportation in transport

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) To justify modes of interaction of modes of transport*
- 2) Perform technical and economic calculations on measures that ensure the efficiency of transport*
- 3) Develop unified systems of transport performance indicators*

Prerequisites

Optimization of transport logistics processes Optimization methods and operations research Optimization of transportation processes

Postrequisites

Final examination

Efficiency of road and transportation complex

Discipline cycle Profiling discipline

Course 4

Credits count 6

Knowledge control form Examination

Short description of discipline

The discipline studies the methodology, methods and techniques of economic analysis, the content and tasks of economic analysis and the design of transport complexes with ensuring the necessary level of quality of transport services, the patterns of formation of passenger flows, cargo flows and traffic organization, the basic principles and procedure for designing transport complexes, functional and cost analysis, economic and mathematical methods of analysis of economic activity; information support, as well as types of economic analysis

Purpose of studying of the discipline

The purpose of teaching the discipline "Efficiency of the road transport complex" is to form students` knowledge and skills in the analysis and design of transport complexes to ensure the necessary level of quality of transport services and its technical and economic efficiency, acquisition of practical skills and abilities in the field of quantitative and qualitative assessment of economic processes and transport management at enterprises using innovative methods.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Apply the basics of designing transport systems, methods for calculating the economic efficiency of capital investments (investments) and new equipment; fixed assets and indicators of their use*
- 2) Receive initial information, calculate and evaluate indicators of passenger traffic, cargo flows and route network*
- 3) To assess the level of efficiency of the road transport complex based on the results obtained*

Prerequisites

Postrequisites

Final examination

Innovative technologies of terminal cargo processing

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the general principles of terminal transportation technology: classification of terminals and their functions, factors of terminal competitiveness, road terminals, intermodal terminals, logistics centers, transport performance indicators for continuous and terminal transportation systems, calculation of technical and economic performance indicators of terminal systems and adjustment by the number of terminals, compilation of tables of transportation routes between cargo senders, terminals and recipients

Purpose of studying of the discipline

The purpose of studying the discipline is to familiarize with the terminal technology of cargo handling

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) Develop and form innovative transport systems for the collection and distribution of material products*
- 2) To evaluate quantitative and qualitative methods of analysis when making management decisions in the organization of innovative terminal cargo processing*
- 3) Make decisions on the choice of innovative technologies for terminal cargo processing based on the choice of automated systems of modern terminal complexes for processing, sorting, as well as further staffing of goods intended for retailers*

Prerequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery *New technologies in transportation*

Postrequisites

Final examination

Modern technologies and devices for optimizing terminal activity

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the main provisions on the operation of terminals: the goals and objectives of terminal technology, definitions, general principles of terminal transportation technology, classification, aspects of terminal competition, terminals of road transport, intermodal terminals, logistics centers, automated container terminal management systems, applied modern technologies and devices of terminal activity, as well as methods of application of solutions that are aimed at to improve the transportation of containers between the operating areas of the terminal

Purpose of studying of the discipline

The purpose of the study: to familiarize future specialists with modern technologies and methods of optimizing terminal cargo processing; to study the types and methods of forming terminal systems and calculating their parameters.

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) Classify terminal and warehouse complexes.*
- 2) Analyze modern concepts of development of modern technologies of terminal cargo processing*
- 3) Use technical standards for terminal cargo processing technologies*

Prerequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery *New technologies in transportation*

Postrequisites

Final examination

Terminal transportation technologies

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basic concepts, definitions, goals and objectives of terminal technology, general principles of terminal transportation technology, classification of terminals and their functions, road terminals, intermodal terminals, intermodal terminal operators, efficiency of terminal cargo transportation, principles of construction and operation of terminal systems, logistics concepts of terminal transportation management, as well as prospects for the development of terminal systems in The Republic of Kazakhstan

Purpose of studying of the discipline

The purpose of mastering the discipline is the formation of students` competencies in the field of organizing the implementation of a complex of services for the transport services of shippers and consignees in the transportation of goods, including perishable, based on the principles of logistics, taking into account the effective and rational interaction of modes of transport that make up a single transport system, as well as preparation for conducting organizational and managerial activities in the field of organization of functioning

Learning Outcomes

ON6 To make decisions on the choice of new technologies for cargo processing and passenger delivery based on the study and generalization of innovative approaches of world and domestic experience

Learning outcomes by discipline

- 1) Perform logistics processes at terminals (warehouses).*
- 2) Have skills in the field of terminal logistics and apply them in practice.*
- 3) Analyze the technical and infrastructural development of the terminal and its surrounding area.*

Prerequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery technologies in transportation

New

Postrequisites

Final examination

Basics of ergonomics and design of transport equipment

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies ergonomics, its main tasks, safety, basic concepts and terms, form and content, definitions, comfort, design, methods and techniques of artistic construction in engineering, as well as the design of elements of load-bearing structures of transport equipment and bodywork, controls, the basics of the layout of the driver`s workplace in the cab, passenger seats, taking into account the comfort, visibility and aerodynamics of the body shape , taking into account the requirements of passive and active safety

Purpose of studying of the discipline

The aim is to form students` knowledge that provides a systematic approach to the design of transport

Learning Outcomes

ON7 To make decisions on the maintenance of the transportation process and operation of transport, taking into account the effective use of rolling stock

Learning outcomes by discipline

- 1) Assemble the driver`s workplace.*
- 2) Make constructive decisions that ensure constructive safety and comfort of transport.*
- 3) Conduct a critical analysis of layout schemes and design solutions.*

Prerequisites

Specialized rolling stock

Postrequisites

Final examination

Technical operation of transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the basics of ensuring the operability of transport: methods for determining the standards of technical operation of transport, the main patterns of changes in technical condition, information support of operability and diagnostics of transport, general characteristics of technological processes for ensuring the operability of transport and complex indicators for evaluating the effectiveness of technical operation of transport, factors affecting the technical condition of cars, as well as the main indicators of technical operation

Purpose of studying of the discipline

The aim is to form students` ideas, knowledge and skills in the field of technical operation of transport

Learning Outcomes

ON7 To make decisions on the maintenance of the transportation process and operation of transport, taking into account the effective use of rolling stock

Learning outcomes by discipline

ON 7 To make decisions on the maintenance of the transportation process and operation of transport, taking into account the effective use of rolling stock

- 1) Develop and implement transport security plans for transport infrastructure facilities and vehicles.*
- 2) Define the principles of management of operational work of transport*
- 3)To carry out technical control during storage, operation, maintenance and repair of motor vehicles.*

Prerequisites

Specialized rolling stock

Postrequisites

Final examination

Operation and maintenance of rolling stock

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies technical and organizational measures aimed at maintaining the serviceable technical condition of rolling stock during operation between planned types of routine repairs: the work complexes performed to ensure the operability of all components and equipment, fire safety and traffic safety, the order of maintenance and repair of rolling stock, as well as the proper sanitary and hygienic condition of vehicles, including the use of by appointment, transportation, storage

Purpose of studying of the discipline

The aim is to form students' ideas, knowledge and skills in the field of operation and maintenance of rolling stock

Learning Outcomes

ON7 To make decisions on the maintenance of the transportation process and operation of transport, taking into account the effective use of rolling stock

Learning outcomes by discipline

- 1) Analyze the requirements for ensuring transport security for various categories of transport infrastructure facilities and vehicles*
- 2) Identify potential threats and actions affecting the security of transport infrastructure facilities and transport vehicles, and ensure the implementation of transport security measures at these facilities, depending on its various levels*
- 3) Organize the safe conduct of work during the maintenance and repair of transport.*

Prerequisites

Specialized rolling stock

Postrequisites

Final examination

Service on a transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies freight forwarding services as a complex of transport services, substantiation and determination of quality service parameters by various modes of transport, rational levels of concentration of forwarding services in the service centers of freight and passenger transportation by various modes of transport, stimulation of the development of the transport services market, assessment of the degree and completeness of the availability of execution of orders by modes of transport, advertising activities in transport

Purpose of studying of the discipline

The objectives of the discipline are: mastering by students of theoretical knowledge about the subject, methods and tasks, actual problems of service management in transport.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Distinguish the types of transport services, determine the transport process and its content*
- 2) Evaluate the specifics of service and service on different types of transport*
- 3) To make effective decisions in the professional activities of specialists in terms of the organization of transport services.*

Prerequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery

New

Postrequisites

Final examination

Services in the field of transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the concept, features and classification of transport services, the rational distribution of cargo transportation between all modes of transport, the choice of a suitable service provider, the functions of the transport services market, ensuring timely and complete satisfaction of the needs of the country and the national economy in the transportation of goods with minimal transport costs, rational interaction of various modes of transport by periods of the year, modern transport services

Purpose of studying of the discipline

The purpose of studying the discipline "Services in the field of transport" is to give an idea of goods, their properties, rules of transportation; to clarify the requirements for vehicles and loading and unloading mechanisms when performing transportation; to study the rules for developing transport and technological schemes for the transportation of certain types of goods.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Identify the most important tasks for the promotion of transport services related to the transportation of cargo and passengers
- 2) Develop measures to improve the quality of transport services
- 3) To form transport and cargo units, focusing on the customer's order.

Prerequisites

Modern technologies of cargo and passenger delivery Modern logistics technologies for cargo and passenger delivery technologies in transportation

New

Postrequisites

Final examination

Forwarding services on transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the purpose and role of forwarding services, freight forwarding work during shipment and arrival of cargo, the transport process and freight forwarding services, the classification of forwarding services, the regulatory framework of forwarding services, the rules for the provision of forwarding services, the relationship of the forwarder and the client, the relationship of the forwarder and the carrier, the features of assessing the quality of forwarding services, global trends and international experience in the field of freight forwarding

Purpose of studying of the discipline

The purpose is to get acquainted with forwarding services on transport

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Make decisions on the choice of the carrier and the method of transportation
- 2) Organize the work of the forwarding and transport company.
- 3) Calculate the costs of forwarding and logistics processes.

Prerequisites

Specialized rolling stock

Postrequisites

Final examination

Tariffs in the logistics system

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies tariffs and pricing in transport logistics: classification of transport tariffs and rules for their application, transport costs, cost of transportation, tariffs for various types of transport, tariff plans, a single transit tariff, as well as accounting, dynamics and adjustment of transport tariffs in the activities of transport enterprises, methods of calculating transport tariffs, including indicators that determine the size transportation fees

Purpose of studying of the discipline

The aim is to form students' theoretical knowledge and practical skills in the field of tariff formation, management of material and financial flows.

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Determine urgent fees for transportation of cargo and passengers.
- 2) Analyze the main economic indicators.
- 3) Calculate the cost of transportation and loading and unloading works.

Prerequisites

Mathematical methods of decision of transport tasks Mathematical modeling of economic processes and systems Optimization methods and operations research

Postrequisites

Final examination

Economy in transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the economic laws of the market in the field of transport services that contribute to the formation of economic thinking, tariffs and pricing in transport logistics: classification of transport tariffs, tariffs for various types of transport, cost of

transportation, as well as accounting and methods of minimizing transport costs; dynamics and adjustment of transport tariffs in the activities of transport enterprises, including the calculation of tariff tables

Purpose of studying of the discipline

The aim is to provide students with knowledge and skills that allow them to structure and solve the economic problems of transport enterprises and, thus, ensure their competitiveness in the transport services market.

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) Calculate rates and delivery times
- 2) Analyze the directions and ways to increase the economic efficiency of the development and reconstruction of technical means
- 3) Apply planning methods

Prerequisites

Mathematical methods and models in logistics Mathematical methods of decision of transport tasks Mathematical modeling of economic processes and systems

Postrequisites

Final examination

Economic processes in transport

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the importance of transport in the system of public production and economic problems of transport of the Republic of Kazakhstan in the conditions of the formation of a market economy, the basic principles and features of transport management: planning of investments, working capital and logistics in transport, operating costs of transport, transportation costs., economic analysis of production and financial activities, as well as the activities of enterprises transport in a market economy

Purpose of studying of the discipline

The aim is to form students` theoretical knowledge and practical skills in the field of economic processes in transport

Learning Outcomes

ON3 Use the basics of mathematical and economic knowledge to solve logistical problems

Learning outcomes by discipline

- 1) To determine the interrelationships of the development of transport systems and the change of economic relations
- 2) Identify and analyze economic problems in the transport process and the transport enterprise as a whole
- 3) Apply the principles of scientific organization of work

Prerequisites

Mathematical methods and models in logistics Mathematical methods of decision of transport tasks Mathematical modeling of economic processes and systems

Postrequisites

Final examination

Intellectual property in quality management

Discipline cycle	Basic disciplines
Course	4
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the basics, definitions and basic provisions and protection of intellectual property and copyrights, regulatory and legislative acts on innovative activities of enterprises, the composition, volume, condition and development of intangible assets of transport enterprises, improving the qualification level of employees, quality bonuses for enterprises and specific transport workers, accounting for innovation proposals and inventions during production

Purpose of studying of the discipline

The aim is to familiarize students with the theory and practice of intellectual property management in organizations of various types and possible ways of applying the knowledge gained in practice

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Evaluate the commercial prospects of intellectual property
- 2) To determine the necessary set of measures for the protection of intellectual property, taking into account the specifics of its further use
- 3) Evaluate the prospects for business development when introducing intellectual property objects

Prerequisites

Organization of transport and logistics activities Transport-logistic infrastructure Logistic of the system of international transport processes

Postrequisites

Final examination

Fundamentals of innovation and patenting

Discipline cycle	Basic disciplines
Course	4
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the scientific, theoretical and methodological foundations of patenting and innovation, the basic terms and concepts of intellectual property, methods of legal regulation of innovation, state systems of regulation and protection of intellectual property rights, to make applications for property objects; claims and the scope of patent rights, the organization of the preparation of application materials submitted for patenting intellectual property objects of the Republic Kazakhstan, as well as the implementation of expertise

Purpose of studying of the discipline

The aim is to familiarize students with the theory and practice of innovative activities in transport organizations and possible ways of applying the knowledge gained in practice

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) To understand the ways of separation and consolidation of the right.*
- 2) Conduct expert examinations and prepare application materials submitted for patenting transport property objects*
- 3) Work with patent documentation*

Prerequisites

Organization of transport and logistics activities Transport-logistic infrastructure Logistic of the system of international transport processes

Postrequisites

Final examination

Certification and licensing of transport and logistics services

Discipline cycle	Basic disciplines
Course	4
Credits count	3
Knowledge control form	Examination

Short description of discipline

The discipline studies the basics and principles of licensing and certification systems for transport services; regulatory legal acts of the legislation of the Republic of Kazakhstan in the field of licensing and certification of certain types of activities and certification of products, processes, works and services; procedure and conditions for issuing licenses; formation of organizations for licensing and certification of rolling stock; national and international licensing and certification systems; organization, procedure for certification of vehicles

Purpose of studying of the discipline

To familiarize future specialists with the systems of licensing and certification in transport, as well as to instill practical skills in preparation for obtaining a license to carry out motor transport activities and a certificate of conformity for vehicles and spare parts for them.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Analyze legislative acts and technical regulations applicable to this type of transport, including traffic safety, working conditions, environmental issues*
- 2) Classify the types of licensing activities and certification of vehicles, spare parts, materials and services*
- 3) Apply the methods of organization of expertise and audit during certification of manufactured parts, assemblies, aggregates and systems for motor transport, services and works on maintenance and repair of cars, transportation of passengers by road, possess the skills of preparation and development of certification and licensing documents*

Prerequisites

Organization of transport and logistics activities Transport-logistic infrastructure Logistic of the system of international transport processes

Postrequisites

Final examination

Innovative directions in professional activity

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies innovative technologies of cargo delivery: the main directions of innovative activity in the transport sector, the application of scientific achievements in various modes of transport, the development of the transport network, innovative technologies in logistics, the application of innovative concepts in logistics, electronic logistics and e-business, innovative processes and scientific and technological progress in the field of international logistics, taking into account the world experience, economic competition in the field of innovation

Purpose of studying of the discipline

To provide students with systematized knowledge and the formation of professional competencies in the field of innovation management.

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Determine the importance and role of state support for innovation and innovation infrastructure organizations;
- 2) Evaluate the commercial prospects of innovative development;
- 3) Conduct a primary market analysis, develop a business model, calculate the financial indicators of the project.

Prerequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Postrequisites

Final examination

Logistics strategies and innovation

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies the role of logistics in the global economy, logistics policy and strategy, their characteristics, logistics systems depending on the types of markets, integration of the main functions of logistics, marketing, production and finance, as well as innovative technologies in logistics, types and types of logistics strategies, the application of innovative concepts in logistics activities, their classification, implementation strategies innovative logistics, electronic logistics and electronic business, global logistics problems

Purpose of studying of the discipline

Formation of students` knowledge in the field of modern innovative technologies for managing logistics processes of the digital economy, as well as the development of skills for solving management tasks using modern mechanisms of innovative logistics

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) To argue the application of strategic solutions in logistics, business process reengineering measures;
- 2) Explain the need to apply innovative logistics techniques;
- 3) Critically judge the advantages and disadvantages of practical solutions in innovative logistics

Prerequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Postrequisites

Final examination

Personnel management

Discipline cycle	Profiling discipline
Course	4
Credits count	5
Knowledge control form	Examination

Short description of discipline

The discipline studies personnel as an object of management and the functional division of labor, the principles of personnel management and the organizational structure of the personnel management service: legal, technical, informational and personnel support, relocation, analysis of personnel potential, providing a personnel reserve, business career planning, calculation of personnel needs, personnel management issues of transport enterprises, employee performance assessment, application of bonus systems

Purpose of studying of the discipline

To give the basics of theoretical knowledge in the field of personnel management and HR technologies, to form your own idea of the construction and development of the company`s personnel management system

Learning Outcomes

ON9 Apply modern management approaches, business administration and entrepreneurial solutions in the field of logistics and supply chain management

Learning outcomes by discipline

- 1) Identify modern HR management strategies, team activities, factors of effective influence on motivation
- 2) Create a motivating work environment in the organization; design, implement and evaluate procedures for attracting new employees, training, staff development and employee support.
- 3) Possess the skills of personnel selection and recruitment technology, organization and certification of personnel.

Prerequisites

Global logistics and SCM Foreign trade operations and their transport support Supply chain planning and management

Postrequisites

Final examination

Pre-diploma practice

Discipline cycle	Profiling discipline
Course	4
Credits count	15
Knowledge control form	Total mark on practice

Short description of discipline

The pre-graduate practice, aimed at developing general and consolidating professional competencies, deepening initial professional experience, forms specialists capable of solving economic, managerial and production tasks. The knowledge gained, studied general education, basic and professional disciplines, including industrial practices, should be used as much as possible when writing and defending the final work / project and applied in the future in professional activities

Purpose of studying of the discipline

The purpose of the pre-graduate practice is to confirm theoretical knowledge in professional modules; search, collection, analysis, systematization of information, conducting research necessary for writing a final qualifying work, confirming the formed professional competencies, as well as adaptation to the labor market.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Apply the legal, regulatory, technical and organizational bases for organizing the transportation process and ensuring the safety of vehicles in various conditions.
- 2) Apply the methodology for analyzing the implementation of strategic and operational logistics plans.
- 3) Evaluate the efficiency of logistics systems and control of logistics operations.

Prerequisites

Production practice 2

Postrequisites

Final examination

Production practice 3

Discipline cycle	Profiling discipline
Course	4
Credits count	15
Knowledge control form	Total mark on practice

Short description of discipline

The third industrial practice, being one of the components of the training of highly qualified transport specialists, contributes to the adaptation and successful work in transport companies. The main objectives of the third industrial practice are: integration of educational, theoretical, professional, practical and research activities of students, as well as focus on the use of modern methods of calculation and analytical work in logistics companies

Purpose of studying of the discipline

Acquaintance and study with the real practical work of the enterprise, and the management system operating on it, used to solve production problems. Participation in the maintenance of transportation processes. Acquisition of practical skills of individual and collective development of transportation processes, formation of technical documents. Development of skills of independent solution of tasks for the management of the transportation process.

Learning Outcomes

ON8 Analyze and process information, technical data, indicators and performance of transport systems

Learning outcomes by discipline

- 1) Provide services to shippers and consignees in the preparation of transportation documents, delivery and receipt, delivery and export of goods, in the performance of loading and unloading and storage operations, preparation of rolling stock and its additional equipment during loading, cargo insurance, in determining the fee for the transportation of goods and passengers.
- 2) Identify vulnerabilities and methods of eliminating deviations from planned indicators in the operation of the logistics system and (or) its individual elements.
- 3) Analyze the performance of the logistics system and participate in the development of measures to improve its efficiency.

Prerequisites

Production practice 2

Postrequisites

Final examination