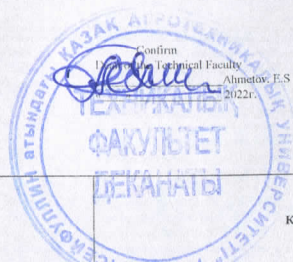


CATALOG OF ELECTIVE DISCIPLINES
For students in the direction of preparation 6B113 Transport services
Brief description of the elective disciplines of the educational program



| EPG | EP | Form of education | The name of discipline | Code of subject | Discipline cycle | Component | Number of credits | Level of training | Cafedra | Course | Academic period | Pre-requisites | Post-requisites | Brief content of the discipline | Key learning outcomes | Name of the alternative discipline |
|----------------------------------|------------------------------------|--|--|-----------------|------------------|-------------------|-------------------|-------------------|---|--------|-----------------|-------------------------------|---|---|---|--|
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Basics of economics and law | OEP 2111 | GER | Elective subjects | 5.0 | Bachelor | Economy | 2 | 2 | History of Kazakhstan | Economics of firm and entrepreneurship | The discipline promotes knowledge of the subject of economic theory and methods of research, the basis of public production and forms of public economy, the mechanism of functioning of the market system, production, costs and income of the firm, national economy. Give an assessment of economic growth and instability of the market economy, inflation and unemployment as manifestations of economic instability. Demonstrate knowledge and skills in the financial and monetary credit system in the national economy and economic security. To master the basics of the theory of the state and law, the basics of constitutional, administrative, civil, labor, family, criminal law. | Analyze in a logical and quantitative way the conditions for the development of production and evaluate the competitiveness of created products on the principles of engineering, study innovative entrepreneurship and anti-corruption culture, formulate inventions | Basics of design |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Basics of design | | GER | Elective subjects | 5.0 | Bachelor | Technical mechanics | 2 | 2 | | | The development of students' elementary skills in the design and design of mechanisms and machine parts. Mastering by students of the provisions of the system of standards for the implementation, execution, storage and use of design documentation, the theoretical foundations and requirements of ESKD standards. Fundamentals of designing mechanisms for general machine building, purpose and development of practical skills in solving complex design problems. | Demonstrate the skills of designing and calculating the structures of agrotechnological machines, substantiating the system of machines and equipment for cultivation, harvesting, storage and processing of crop and livestock products. Develop technical drawings with the requirements of the ESCD, possess the skills of modern computer-aided design, apply in practice the compliance of the developed projects and technical documentation, and other regulatory documents on the design and calculation of design development. To show the ability of logical and critical thinking, mathematical modeling of real processes and phenomena, calculations of internal combustion engines, schematics, design development, technological maps for the production of agricultural products. Choose the methodology and methodology of mathematical modeling and analysis of the basic physical and mechanical properties of structural and fuel-lubricants, apply the laws of mechanics of materials in the development of projects in professional activities. | Basics of economics and law |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | The interaction of transport | VVT 2220 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 2 | 3 | Transportation Management | Organization of transportations and traffic control | Forms of interaction between different modes of transport; laws of development of technical means and operation of different types of transport; peculiarities of different types of transport into a unified transport system; technical and operational characteristics of transport modes, to choose the technical means for the interaction of different modes of transport; to determine the structure and capacity of transport nodes; to identify the technological schemes of an overload of the main cargoes at the points of splicing, transport | | Device Basics of vehicles - I |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Device Basics of vehicles - I | | BS | Elective subjects | 5.0 | Bachelor | Technical service | 2 | 3 | | | Basics of the engine, the duty cycle. Crank mechanism. Classification. Components and their purpose. Gas distribution mechanism. Timing phase. Cooling system. Features of devices of cooling systems. Lubrication system. Supply system. Features of diesel and gasoline power systems. Ignition system. Electrics. Current source. Current consumers. Auxiliary equipment. Starting system. | | The interaction of transport |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Interchangeability of standardization and technical measurements | VSTI 3200 | BS | Elective subjects | 5.0 | Bachelor | Стандартизация, метрология и сертификация | 3 | 1 | Digitalization in engineering | Modeling of engineering systems | The studying of modern worldview concepts and principles in the field of interchangeability, standardization and technical measurements. The acquisition of deep knowledge and solid skills for their application in practice. Familiarization of students with the basics of standardization and interchangeability and development of students' skills in solution to a questions of practical use of reference technical literature in the production, repair and operation of equipment. | Develop technical drawings with the requirements of the ESCD, possess the skills of modern computer-aided design, apply in practice the compliance of the developed projects and technical documentation, and other regulatory documents on the design and calculation of design development. | Device Basics of vehicles - II |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Device Basics of vehicles - II | OUTSI 3229 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 1 | | | Transmission. The classification of total device. The principle of operation of the components. Clutch. Variable transmission. Transfer case. Boxes machines. Driveline. Back axle. Main gear. Differential. Carrier system. Views. Design features. Suspension. Chassis. Steering. Brake system. Classification. Component. Principle of operation. | | Interchangeability of standardization and technical measurements |

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| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Technology and mechanization of cargo handling works | TMPRR 3222 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 1 | Descriptive geometry and engineering graphics | labour safety | Highly efficient production of loading and unloading warehouse operations based on the use of modern systems of machines, technical and economic task for the design and creation of new loading and unloading machines; to organize the commissioning, maintenance and repair of modern means of mechanization and automation both in a centralized manner and by local means | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation) Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them, to Know the basic principles of forwarding activity; to Apply the | Fluid and gas mechanics, hydro and pneumatic actuator |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Fluid and gas mechanics, hydro and pneumatic actuator | SGMGP 2308 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 1 | | | | | Technology and mechanization of cargo handling works |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Basics of Transportation Loads | Gru 3219 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 1 | The interaction of transport | Organization of transportations and traffic control | International transport classification of goods and the classification applied on motor transport, selection of means of protection and marking signs; norms of natural loss of various types of goods; registration of documentation on transportation of goods; calculation of number of cargo units in transport container according to standard standard sizes; to count number of containers and pallets for transportation of the set volume of | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation) Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them, to Know the basic principles of forwarding activity; to Apply the | Basics on designing of the car |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Basics on designing of the car | AKN 3309 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 1 | | | | | Basics of Transportation Loads |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Organization of cargo transportation | OGP 3200 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 2 | Basics of Transportation Loads | Transport logistics | Normative legal acts defining the order of transportation of goods by transport; conclusion of the contract for transportation of goods, provision of vehicles; acceptance of cargo for transportation, loading of goods into vehicles and unloading of goods from them; terms of delivery of cargo, delivery of cargo, storage of cargo in the terminal of the carrier, cleaning of vehicles, containers, features of transportation of certain types of goods | The ability to determine the legal framework and legislation, trends in economic development of the Republic, has deep knowledge in the field of national policy and social priorities, socio-political concepts and structures, historical and socio-political situation in the world; to Use General concepts and basic formulas of mathematics in solving problems; to assess the adequacy of the choice of mathematical models to solve problems; to Apply theoretical knowledge to solve specific physical problems and situations, to analyze the results of physical experiment. The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of | Transport systems and transportation process |

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| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transport systems and transportation process | TSPP 3230 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 2 | | Features of technological influences on the vehicle and PP of various types; organizational structure and management structure of transport enterprises; to analyze and develop recommendations to improve the efficiency of the transport enterprise; to classify transport and transport-technological machines for various purposes, systems and elements of regulatory documentation | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Organization of cargo transportation | |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Economics of firm and entrepreneurship | EPP 3200 | BS | Elective subjects | 4.0 | Bachelor | Economy | 3 | 2 | Basics of economics and law | Transport logistics | The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market, joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation | Possess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance | The engine management system |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | The engine management system | SUDVS 3312 I | BS | Elective subjects | 4.0 | Bachelor | Technical service | 3 | 2 | | | | | Economics of firm and entrepreneurship |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Organization of transportations and traffic control | OPUD 3221 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 2 | Logistics technology of cargo delivery | Transport logistics | The general principles of transport operations management, based on the use of advanced technology and technology; operation of individual transport facilities with regard to the use of an automated control system; theoretical bases on optimization of production processes, and, consequently, of the whole complex included in the technology of their work, taking into account economic efficiency in the implementation of planned tasks | | Transport systems and transportation process |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transport systems and transportation process | | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 2 | | | Features of technological influences on the vehicle and PP of various types; organizational structure and management structure of transport enterprises; to analyze and develop recommendations to improve the efficiency of the transport enterprise; to classify transport and transport-technological machines for various purposes, systems and elements of regulatory documentation | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Organization of transportations and traffic control |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transport logistics | TL 3300 | AS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 3 | Organization of transportations and traffic control | Internship | Formation and development in transport logistics. Transport logistics support. Modern transport technology supply chain. Terms of delivery and legal aspects of transport logistics. Information technologies in transport logistics | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the | Basics of organization of wheeled and castorpillar machines |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Basics of organization of wheeled and castorpillar machines | | AS | Elective subjects | 5.0 | Bachelor | Mechanization of technological processes | 3 | 3 | | | General information about the design, arrangement and operation of units and systems of basic models, basic adjustments, techniques for maintaining technical condition, expanding practical skills and abilities in the field of technical operation of domestic and foreign tractors and agricultural vehicles widely used in farms. | To organize highly efficient operation of machines, apparatus, machinery and technological equipment in production, to show leadership qualities | Transport logistics |

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| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transportation and forwarding services in transport | TEOT 3218 | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 3 | Organization of cargo transportation | Licensing and certification of transport vehicles and services | The main provisions of transport and forwarding activities; use the legal framework of transport and forwarding activities; calculation and analysis of quality indicators of freight and passenger traffic; based on the organization and technology of transportation, safety requirements of the transportation process | The ability to determine the legal framework and legislation, trends in economic development of the Republic, has deep knowledge in the field of national policy and social priorities, socio-political concepts and structures, historical and socio-political situation in the world; to Use General concepts and basic formulas of mathematics in solving problems; to assess the adequacy of the choice of mathematical models to solve problems; to Apply theoretical knowledge to solve specific physical problems and situations, to analyze the results of physical experiment. The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). Critical understanding of classification, indexing and arrangement of vehicles; Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding | Fundamentals on design and operation of process equipment |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Fundamentals on design and operation of process equipment | | BS | Elective subjects | 5.0 | Bachelor | Technical service | 3 | 3 | | | About the place of the processing equipment in production funds and influence on technical operation of transport equipment (TE), determination of need for the processing equipment and an assessment of efficiency of its application; application of the processing equipment on production, studying influence of the processing equipment on transport complements | | Transportation and forwarding services in transport |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | labour safety | OT 4304 | AS | Elective subjects | 4.0 | Bachelor | Mechanization of technological processes | 4 | 1 | Basics of economics and law | Fundamentals of patenting for transport | Occupational hazards at the workplace, production site, enterprise, taking into account the dangerous factors of the production environment, the labor process; requirements of labor laws, rules and labor protection standards at the workplace, production site, enterprise using knowledge of technological production processes; labor law requirements. The Labor Code of the Republic of Kazakhstan and other regulatory legal acts containing labor law provisions relating to the organization of labor (internal work regulations, leave regulations, travel regulations, etc.). | | Device Basics of vehicles - II |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Device Basics of vehicles - II | | AS | Elective subjects | 4.0 | Bachelor | Technical service | 4 | 1 | | | Transmission. The classification of total device. The principle of operation of the components. Clutch. Variable transmission. Transfer case. Boxes machines. Driveline. Back axle. Main gear. Differential. Carrier system. Views. Design features. Suspension. Chassis. Steering. Brake system. Classification. Component. Principle of operation. | | labour safety |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Organization of passenger transportation | OPP 4300 | AS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 1 | Providing transport safety | Transport planning city | Parameters that determine the power of traction in passenger traffic and the scope of various types of traction; the main issues of the organization of long-distance, local and suburban trains; organization of ticket and cash operations for long-distance, local and suburban communications, the system of centralized accounting and distribution of seats on passenger trains; the system of organization of high-speed passenger traffic, the requirements for providing its technical means | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. Ability to use corporate governance tools in order to increase the economic and investment attractiveness and capitalization of the company, methods and functions of process control; ability to model engineering systems, the creation of engineering systems for administrative, industrial, commercial and residential buildings, the use of special software for simulation of engineering systems. Capable to organize traffic and the conditions of carriage of goods, freight rates, shipping documents, maintaining and clearance of unsafe cargo transportations; to Know the main activities on the organization of passenger transportation, traffic and safety transportation, organization of ticket and cash operations, legislation and the technical regulations operating in the transport, including passenger transportation. Ability to work in a team, to be flexible and mobile in various situations; knowledge of rules and norms of labor protection in the workplace; Ability to transport logistics, modern transport and technological supply chains; Ability to master issues: engineering surveys, design, construction, operation, maintenance, monitoring and reconstruction of roads, buildings and structures; Know the Regulations on licensing of transportation, forwarding and other activities related to the implementation of the transport process, repair and maintenance of vehicles on road transport in the Republic of Kazakhstan. The position of Kazakhstan on transport inspection. | Transport systems and transportation process |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transport systems and transportation process | | AS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 1 | | | Features of technological influences on the vehicle and PP of various types; organizational structure and management structure of transport enterprises; to analyze and develop recommendations to improve the efficiency of the transport enterprise; to classify transport and transport-technological machines for various purposes, systems and elements of regulatory documentation | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment. Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects. Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters. Ability to prevent conflict situations in interaction with enterprises, mass media and act as a mediator in conflict resolution. Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Organization of passenger transportation |

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| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Organization of cargo and commercial work | OGKR 4303 | AS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 1 | Transport logistics | Process Control | Organization of cargo and commercial work on the basis of advanced technology, automated control systems and integrated mechanization and automation of loading and unloading. Freight and commercial work on railway transport. Cargo and commercial work on road transport. Cargo and commercial work on air transport. Cargo and commercial work on water transport | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport. Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centers; to know the international transport classification of goods and the classification used in the transport sector; to Know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to Know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of | Bases of production technology and transport technique repair |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Bases of production technology and transport technique repair | | AS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 1 | | | Regularities of formation of productivity and carrying capacity of means of service; organization of maintenance, rational technology of maintenance and complex indicators of maintenance and repair of transport equipment; to form students' scientific, reasonable approach to the organization and technology of work on maintenance and repair of transport equipment | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Organization of cargo and commercial work |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Fundamentals of patenting for transport | OPT 4200 | BS | Elective subjects | 3.0 | Bachelor | Technical service | 4 | 2 | Descriptive geometry and engineering graphics | Internship | The basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; the formulation of goals and objectives of the research; the methodology of organizing and conducting research; principles of analysis, hypotheses, synthesis of existing information | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology Possession of skills of the address with modern equipment, ability to use information technologies in the sphere of professional activity | Economics of firm and entrepreneurship |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Economics of firm and entrepreneurship | | BS | Elective subjects | 3.0 | Bachelor | Economy | 4 | 2 | | | The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market; Joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation | Possess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance | Fundamentals of patenting for transport |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Transport planning city | TPG 4200 | BS | Elective subjects | 4.0 | Bachelor | Technical service | 4 | 2 | Organization of transportations and traffic control | Internship | Systems of urban transport and road network of the city; development of measures to improve the transport and operational characteristics of the network; classification of city streets and roads; capacity of the street network of the city; design elements of the street and road network of the city; design urban freight roads; determine traffic patterns at the intersections of city streets | The ability to define the methods of descriptive geometry and engineering graphics required to create machines, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-geodetic works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). Critical understanding of classification, indexing and arrangement of vehicles. Able to organize the movement of transport, management, warehousing of goods; Apply advanced technologies of cargo delivery, delivery of goods on special conditions, to know the factors and levels of logistics development, basic concepts of logistics; It is able to create the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for innovative development and, in General, the progressive development of the digital ecosystem. The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport. Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to Know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to Know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of modern systems of cars; the Development of urban transport system and street network of the city. | Bases of production technology and transport technique repair |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Bases of production technology and transport technique repair | | BS | Elective subjects | 4.0 | Bachelor | Technical service | 4 | 2 | | | Regularities of formation of productivity and carrying capacity of means of service; organization of maintenance, rational technology of maintenance and complex indicators of maintenance and repair of transport equipment; to form students' scientific, reasonable approach to the organization and technology of work on maintenance and repair of transport equipment | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Transport planning city |
| B095 - «Transportation Services» | 6B11301 - «Logistics in transport» | Full-time (bachelor 4 years) trimester | Modeling of engineering systems | MIS 4305 | AS | Elective subjects | 4.0 | Bachelor | Technological machines and equipment | 4 | 2 | Information and communication technologies | Internship | Modern mathematical methods of calculation modeling of engineering systems of automatic control in relation to complex objects; innovative technologies and methods of calculation modeling of engineering systems of management of objects on the basis of modern scientific approaches; data on the development and design of complex and multifactorial problems modeling of engineering systems of technical and scientific objects | | Economics of firm and entrepreneurship |

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| B905 - Transportation Services | 6B11301 - Logistics in transport | Full-time (bachelor 4 years) trimester | Economics of firm and entrepreneurship | AS | Elective subjects | 4.0 | Bachelor | Economy | 4 | 2 | 2 | The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production of the enterprise; Enterprise as an economic entity of the market; Joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation | Process knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well-formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance | Modeling of engineering systems |
| B905 - Transportation Services | 6B11301 - Logistics in transport | Full-time (bachelor 4 years) trimester | Process Control | BS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 2 | 2 | Methods and functions of process control. The concept of control. Technological process as an object of management. Methods of process control. The specifics of batch and continuous processes as objects of management | The ability to determine the legal framework and legislation, trends in economic development of the Republic, has deep knowledge in the field of national policy and social priorities, socio-political concepts and structures, historical and socio-political situation in the world, to use General concepts and basic formulas of mathematics in solving problems, to assess the adequacy of the choice of mathematical models to solve problems, to Apply physical and mathematical models to solve practical problems, to use the methods of descriptive geometry and engineering graphics required to create methods, devices and complexes meeting modern requirements of accuracy, efficiency, reliability, cost-effectiveness; the Ability of the design of the planned signs and high-rise frames for precise engineering-axometric works; a working knowledge of the language professional knowledge (knowledge of the grammatical structures, lexical units professional orientation). The ability to develop processes of transport management, organization and operation management, development, implementation of marketing methods and management in the organization of the transportation process; Ability to use basic concepts and laws of mechanics, principles derived from these laws for the study of the movement of machine elements and mechanisms; is Able to use a comprehensive approach to ensuring safety in transport; Ability to use the latest achievements in the field of interchangeability and technical measurements. The ability to prevent and resolve conflict in interactions with other logistics centres; to know the international transport classification of goods and the classification used in the transport sector; to know the basics of patent law and patenting in the Republic of Kazakhstan, the legal basis of protection and conditions of patentability; Able to organize forms of interaction between different modes of transport; to know General principles of control over the operational work of transport, based on the use of advanced equipment and technology. The ability to analyze the effectiveness of innovations and innovation activities of logistics centers; to know the legal regulations governing the carriage of goods transport, accepting cargo for transportation, loading of cargo into vehicles and unloading of cargo from them; to know the basic principles of forwarding activity; to Apply the highly efficient production of loading and unloading work, warehouse operations through the use of | Bases of production technology and transport technique repair |
| B905 - Transportation Services | 6B11301 - Logistics in transport | Full-time (bachelor 4 years) trimester | Bases of production technology and transport technique repair | BS | Elective subjects | 5.0 | Bachelor | Technical service | 4 | 2 | 2 | Regularities of formation of productivity and carrying capacity of means of service; organization of maintenance; national technology of maintenance and complex indicators of maintenance and repair of transport equipment; to form students' scientific, reasonable approach to the organization and technology of work on maintenance and repair of transport equipment | Ability to develop design, technological, engineering and design estimates for the creation and repair of transport equipment Critical understanding and analysis of solutions and consequences forecasting, planning and implementation of transport tasks and projects Ability to develop projects of transport equipment and technology; taking into account technological, design, aesthetic, economic and other parameters Analysis of innovation efficiency of transport enterprises, application of management skills in innovative processes of transport equipment and technology | Process Control |
| B905 - Transportation Services | 6B11301 - Logistics in transport | Full-time (bachelor 4 years) trimester | Fundamentals of robotics | BS | Elective subjects | 5.0 | Bachelor | Computer science | 4 | 2 | 2 | Formation of students knowledge and skills in designing and programming robots. To program the robot's movement, to connect and program the robot's response to sensors, the purpose of structural and electronic parts of robotic designers, features of standard models of robots, the purpose of sensors | To study the basic concepts of the laws of engineering mechanics, mechanics of materials, robotics and safety to basic. To organize the production process operation of MTP and maintenance of modern agricultural machinery with the introduction of innovative technologies and with the creation of business entities | Economics of firm and entrepreneurship |
| B905 - Transportation Services | 6B11301 - Logistics in transport | Full-time (bachelor 4 years) trimester | Economics of firm and entrepreneurship | BS | Elective subjects | 5.0 | Bachelor | Economy | 4 | 2 | 2 | The concept of an enterprise as a subject and object of business activity; The products of the enterprise, its competitiveness; Production resources of the enterprise; Enterprise - an economic entity of the market; Joint stock companies; Small businesses; Taxation of small businesses; Organization and registration of a business firm; Competition in the business system; Commercial activities of the company; Business infrastructure; Marketing in the business system; Management in the activities of the enterprise; Management Motivation | Posess knowledge of socio-humanitarian and economic disciplines, willingness to demonstrate a well-formed worldview, civic and moral position of a highly educated person with a broad outlook and a culture of thinking. Demonstrate knowledge of natural science disciplines. The ability to explain, formulate and use basic indicators for solving tasks, communication with other sciences and its practical significance | Fundamentals of robotics |

Head of the Department "Transport Equipment and Technologies"

Balgabekov T.K.