

# NON-COMMERCIAL JOINT-STOCK COMPANY "K. I. SATPAYEV KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY"

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#### **GRADUATE MODEL**

# KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K. I. SATPAYEV

(Satbayev University)

Bachelor's degree in the educational program

6B11301 "Transport services"

(code, name of the educational program)

M.029-04-01.1.01 - 2024

## ПРЕДИСЛОВИЕ

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#### introduction

The development of a graduate's competence model becomes an absolute condition for implementing the main directions of the Bologna process and a requirement of the modern labor market. The competence model of a graduate (bachelor's degree) is designed to answer the question of what professional tasks a specialist of a certain rank (position), a particular profile should be able to solve. The formation of a modern model of a university graduate that meets the needs of stakeholders and all interested parties is the main strategic goal of Satbayev University and is provided with the necessary resources for the educational process, including personnel, educational and methodological, information and material and technical support. The University conducts a targeted personnel policy and systematic improvement of the material and technical base of the university to ensure the quality of training of bachelor's degree graduates in demand on the labor market.

The regulatory framework of the Bachelor's degree model for University educational programs is based on the following documents:

- -Law of the Republic of Kazakhstan "On Education" No. 319-III of July 27, 2007 (as amended on July 11, 2017)
- -State Program of Education Development of the Republic of Kazakhstan for 2011-2020, approved by Decree of the President of the Republic of Kazakhstan No. 1118 dated 07.12.2011.
- -State Educational Institution of Higher and Postgraduate Education No. 604 dated 31.10.2018
- -"Rules of organization of the educational process on credit technology of training" (No. 152 of 20.04.2011 with amendments and additions No. 563 of 12.10.2018)
- -Standard rules for the activities of educational organizations that implement educational programs of higher education. Resolution of the Government of the Republic of Kazakhstan dated April 7, 2017 No.
- 181. Qualification directory of positions of managers, specialists and other employees, approved by the Order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated May 21, 2012 No. 201-p-m as amended on 17.04.2013.)

# 1 BRIEF DESCRIPTION OF THE EDUCATIONAL PROGRAM. DEVELOPMENT AND PROSPECTS

#### Name and definition of OP-6B11301 "Transport services"

The objects of professional activity of the bachelor of education "**OP-6B11301**"**Transport services**"" are:

- transport organizations, enterprises and companies that provide transportation of goods and passengers;
- logistics companies and organizations that manage and optimize logistics processes: warehousing, storage, distribution, and packaging of goods.
- State and local government bodies responsible for regulating transport activities, transport safety, as well as for planning and developing transport infrastructure;
- -Retail and manufacturing companies that need to transport their goods and materials, and can hire specialists to optimize their logistics processes.
- Information technologies and systems used for managing transport processes, cargo tracking, and data analysis;
- Transport and delivery services that provide express delivery services and ensure delivery of goods from the point of departure to the point of destination.
- Environmental organizations and institutions working on environmental and sustainable development issues that can participate in the development of environmentally friendly and efficient transport solutions;
  - communication networks and switching systems.

Working in the field of Transport logistics makes it possible to solve many important tasks and problems related to transportation management and optimization of logistics processes.

Bachelor's training in the direction of OP 6B11301 "Transport services" involves the formation of certain professional competencies, including knowledge and skills in the following areas:

Bachelor's training in the direction of OP 6B11301 "Transport services" involves the formation of professional competencies that include knowledge and skills in the following areas:

- 1. Knowledge in the field of transport logistics:
- Fundamentals of logistics management, including the theory and practice of organizing traffic flows, inventory management and distribution of goods.
  - 2. Transport law:
- Knowledge of legal norms and regulations related to transport activities, including international and national laws, rules for the transportation of goods and passengers.
  - 3. Economics and management in the field of transport services:
- Fundamentals of financial management, budgeting and evaluation of the effectiveness of transport projects, including methods of cost and profit analysis.
  - 4. Use of information technologies:

- Skills in working with modern software for planning and managing transport processes, including ERP systems and supply chain management (SCM) systems.
  - 5. Quality and Service management:
- Principles and methods of quality assurance in transport and logistics services, as well as customer relationship management skills to improve the level of service.
  - 6. Transportation planning and optimization:
- Skills in designing and optimizing routes, choosing the most efficient means of transport and methods of transportation.
  - 7. Analysis of the transport services market:
- Ability to conduct market research, analyze market trends and customer needs in the field of transport services.
  - 8. Environmental sustainability and safety:
- Knowledge of the principles of environmentally friendly transportation technologies and risk management in the transport sector.
  - 9. Coordination of interdisciplinary processes:
- Ability to interact with various participants in the supply chain: suppliers, contractors, government agencies and customers.
  - 10. Soft skills:
- Development of communication skills, teamwork, conflict resolution and leadership, which is necessary for effective interaction in a professional environment.

The formation of these competencies allows graduates to successfully work in various areas of transport logistics, ensuring effective management of the movement of goods and services, as well as contributing to the development of logistics infrastructure and improving the quality of customer service.

### Bachelor's degree in OP "6B11301 Transport Services"

Its responsibilities also include:

- 1. Transportation planning:
- Development and optimization of routes for transportation of cargo and passengers, taking into account delivery times, costs and means of transport.
  - 2. Organization of transportation processes:
- Coordination of all stages of delivery, including loading, transportation, unloading and processing of necessary documents.
  - 3. Inventory Management:
- Monitoring and controlling the inventory level in warehouses, as well as managing the processes of their storage and distribution.
  - 4. Control over compliance with the rules and regulations:
- Ensuring that transport activities comply with legal requirements, including safety regulations, environmental regulations, and quality standards.
  - 5. Cost analysis and optimization:
  - Evaluate and improve the efficiency of transport operations to reduce costs and

increase profitability.

- 6. Customer service quality assurance:
- Setting and maintaining high standards of service, working with clients to meet their needs and expectations.
  - 7. Document Management:
- Preparation and maintenance of necessary documentation related to transportation, including waybills, transport documents and reporting.
  - 8. Coordination with suppliers and partners:
- Create and maintain productive relationships with service providers and other participants in the supply chain.
  - 9. Risk assessment and management:
- Forecasting potential risks associated with transportation and logistics, and developing strategies to minimize them.
  - 10. Analysis of the market situation:
- Conduct research to identify trends and customer needs in the field of transport services, participate in the development of marketing strategies.
  - 11. Use of modern technologies:
- Introduction and application of information technologies for automation and optimization of logistics processes.

These responsibilities allow the specialist to effectively manage logistics processes, ensuring the reliability and efficiency of transportation of goods and services, as well as maintaining a high level of customer service.

List of positions of OP "6B11301 Transport services" with a description:

- 1. Logistician:
- A specialist responsible for planning, organizing and controlling transport and warehouse operations. It optimizes logistics processes, reduces costs, and manages inventory.
  - 2. Transport Operations Manager:
- Responsible for coordinating all stages of cargo transportation, including selecting vehicles, planning routes, and monitoring delivery deadlines.
  - 3. Transportation Specialist:
- Organizes and controls cargo transportation, works with documents related to transportation, atmosphere and compliance with legal norms.
  - 4. Freight Forwarder:
- Organizes cargo delivery in accordance with customer requests, coordinates actions between shippers, carriers and recipients.
  - 5. Inventory Management Specialist:
- Responsible for monitoring and managing inventory levels, analyzing the needs and storage conditions of goods in warehouses.
  - 6. Transport Logistics analyst:

- Conducts data analysis and research on logistics processes, helps develop strategies and solutions for optimizing transport operations.
  - 7. Logistics Service Quality Manager:
- Monitors the quality of transport and logistics services provided, develops and implements measures to improve the level of service.
  - 8. International Transport Specialist:
- Organizes international cargo transportation, solves customs clearance issues, and interacts with international partners.
  - 9. Logistics Coordinator:
- Coordinates processes within the logistics chain, interacts with various departments and monitors the implementation of tasks.
  - 11. Transport Security Specialist:
- Develops and implements transport safety measures, analyzes risks and creates incident prevention plans.
  - 13. Transport Economist:
- Performs economic analysis of transport operations, evaluates the efficiency of transportation and develops proposals for improving profitability.
  - 14. Logistics Automation Specialist:
- Responsible for the implementation and support of information systems and technologies for automating transportation and warehouse management processes

# 2. COMPOSITE COMPONENTS IN THE FORMATION OF THE GRADUATE MODEL OF AN EDUCATIONAL PROGRAM.

The key components of forming the Graduate Model of an educational program include information about the goals and objectives of the educational program, objects, types and areas of professional activity, the competence model of a specialist (Appendix 1), including descriptors, the type of competencies in accordance with the educational program, and the results of the educational program.

### 2.1 Objectives of the Educational program:

Provide the labor market with qualified personnel in the field of logistics and organization of transport services, the formation of knowledge, skills and abilities that allow them to make effective management decisions in a professional environment.

### 2.2 Objectives of the Educational program:

 formation of theoretical knowledge in the field of theory and practice of transport services, logistics, transport law and management;

- preparation of students to perform practical tasks in the field of organization and management of transport processes, including skills in working with documentation and using modern technologies;
- trainingstudents to solve complex tasks in the field of transport logistics,
   including risk assessment, planning and optimization of transportation;
- developing the ability to integrate knowledge from various fields (economics, law, management) for an integrated approach to the management of transport services;
- Training students to interact with customers, analyze their needs and provide high-quality services in the field of transportation and logistics;
  - development of analytical thinking and decision-making skills;
  - education of sustainable and ethically responsible professionals;
- involvement of students in project, research and entrepreneurial activities in the field of digital logistics;
- training in effective communication, teamwork, leadership and project management in the context of digital transformation.

#### 2.3 General and professional competencies

General and professional competencies, as learning outcomes, are knowledge, skills and abilities acquired at the end of a discipline or course that reflect the requirements.

#### General competencies:

- communicative competence;
- analytical competencies;
- organizational competencies;
- critical and systematic thinking skills;
- teamwork and leadership;
- ethics and civil liability
- ability for self-development and lifelong learning;
- time management and stress tolerance.

#### Professional competencies:

- ability to develop logistics chain diagrams, analyze product flows, and optimize transportation processes;
- skills in planning and organizing transport operations, including choosing the most appropriate means of transportation, routes, and schedules;
  - knowledge of transport legislation;
- competencies in the field of transport and warehouse logistics (organization of an effective system of delivery and storage of goods using digital tools);
- ability to work with modern software products and systems for managing logistics processes, including ERP and TMS (Transportation Management Systems);

skills in risk assessment and ensuring the sustainability of logistics processes;

- knowledge of green and sustainable logistics;
- ability to manage logistics projects and innovations;
- skills in integrating logistics with other business processes.

of

of learning outcomes

# 2.4 Matrix of correlation результатов the educational program with the formed competencies

	RO1	RO2	RO3	RO4	RO5	RO6	RO7	RO8	RO9	RO10	RO11	RO12
PC1	V											V
PC 2		V				V	V					
PC 3		V	V	V	V							
PC 4				V	V	V	V					
PC 5				V								
PC 6					V							V
PC 7						V	V					V
PC 8								V	V	V	V	V
PC 9									V	V	V	V

### 2.5. Personal qualities of a bachelor in the OP "6B11310 Digital Logistics"

Due to the huge growth of the transport services and logistics sector in recent years, there are trends of changes affecting the labor market and the requirements for specialists. Today, specialists in the field of Transport Services play a key role in the global economy, responsible for organizing efficient and safe processes for transporting cargo and passengers. Graduates of such programs can make a significant contribution to the efficiency and competitiveness of transport service organizations, creating new opportunities and challenges for professionals in this field. This imposes requirements on specialists not only in terms of technical knowledge, but also in terms of interpersonal and analytical skills.

Here are some of the skills (personal qualities) that you need to have in order to be a competitive specialist in the field of digital logistics:

- analytical thinking;
- technical competence;
- communication skills;
- project management;
- strategic thinking;
- flexibility and adaptability;
- critical thinking;
- initiative;
- emotional intelligence.
- teamwork skills;
- resistance to stress;
- ethics and social responsibility.

#### **Conclusions**

As a result of the labor market analysis, the following conclusions can be drawn

about the demand for specialists in the field of transport services:

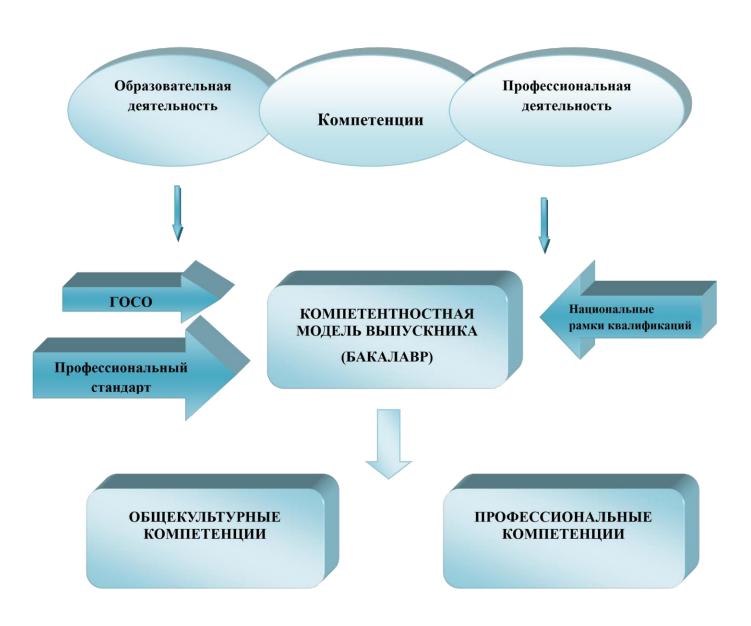
- 1. Growing demand for specialists:
- Increasing volumes of cargo transportation and passenger services in the context of globalization creates an impressive demand for qualified personnel, which opens up opportunities for employment and career growth.
  - 2. The need to adapt to new technologies:
- Professionals should be prepared for rapidly changing technological conditions, have skills in working with modern information systems and data. The ability to use digital tools is becoming one of the key requirements.
  - 3. Environmental responsibility:
- Sustainable development and environmental aspects are becoming important priorities for organizations. Specialists should implement green practices in their activities, which requires additional knowledge and skills.
  - 4. International challenges and standards:
- Globalization requires specialists to have a deep understanding of international legislation and standards, which opens up opportunities for working at the international level.
  - 5. Customer-oriented approach:

"In a highly competitive environment, focusing on the quality of customer service and satisfaction of their needs is becoming a crucial factor for the success of companies in the field of transport services.

Thus, transport service professionals are at the forefront of a dynamic and evolving sector, and their role in meeting the needs of society and businesses will only increase. Success in this profession requires constant development, flexibility and readiness to meet the challenges of the modern world.

Appendix 1

#### **Graduate competence model (Bachelor of IT Management)**



M.029-04-01.1.01 - 2024	Модель выпускника КазНИТУ имени К.И. САТПАЕВА
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**Change Registration Sheet** 

		Туре	Number	Change made		
Sequence number of the change	Section, item of the document	of change (replace, cancel, add)	and date notified	Date	Surname and initials, signature, position	