JSC "ALT University named after. Mukhametzhan Tynyshpayev"

APPROVED
by the decision of the AC ALT from
«12» 05 2025y. (Protocol № 9-1)
President-Rector
Zharmagambetova M.S.

EDUCATIONAL PROGRAM

Name:6B07186 - Transportation process management and railway operation

Level of training: bachelor course

Code and classification of training areas: 6B071 Engineering

Code and group of educational programs: B265 Railway transport and technology

Date of registration in the Registry: 30.06.2025

Registration number: 6B07100156

Almaty, 2025 y

CONTENTS

1. INFORMATION ABOUT THE REVIEW, AGREEMENT, AND APPROVAL OF THE PROGRAM, ITS DEVELOPERS, EXPERTS, AND REVIEWERS

1 DEVELOPED BY:

JSC "ALT University named after Mukhamedzhan Tynyshpaev", Associate Professor of the ALT Department of TSB, PhD	*Bekmagambetova L.K.*
JSC "ALT University named after Mukhamedzhan Tynyshpaev", Associate Professor of the Department of TSB, Candidate of Technical Sciences	*Bitileuova Z.K.*
JSC "ALT University named after Mukhamedzhan Tynyshpaev", Associate Professor of the Department of TSB, Candidate of Technical Sciences	*Vakhitova L.V.*
TransCom LLP, Analyst of the Transportation Dispatch Management Department, Candidate of Technical Sciences	*Aikumbekov M.N.*
Student of the educational program 6B11326-Organization of transportation, traffic, and vehicle operation	*Murat Bekasyl*

2 EXPERTS:

Director for Commercialization LLC Research Center for the Development of the Transportation Process	*Sman A.*
Head of the Transportation Dispatching Department TransCom LLP	*Kosybaev K.K.*

3 THE REVIEWER:

Director of the Transportation Department at TransCom LLP	*Zhumataev A.Zh.*
«Eurasia-Trans» Research Center Project Director	*K. Sharipov*

4 REVIEWED AND RECOMMENDED:

Meeting of the AC of the Department of Transport Services and Business Protocol No. 1, "02" 05 2025 y.	*Musalieva R.D.*
Meeting of the EMB of the Logistics and Business Institute Protocol No. 9, «05» 05 2025 y.	*Musaeva G.S.*
Meeting of the EMC Protocol № 5, «06» 05 2025 y.	*Kodzhaberqenova A.K.*

5 APPROVED by the Academic Council's decision dated «12» 05 2025 y. №9-1

6 INTRODUCED for the first time

2. REGULATORY REFERENCES

The educational program is developed on the basis of the following normative legal acts and professional standards:

1. The Law of the Republic of Kazakhstan "On Education" dated July 27, 2007 No. 319-III (with amendments and additions as of March 27, 2023).

2. The National Qualifications Framework approved by the Protocol of March 16, 2016 by the Republican Tripartite Commission on Social Partnership and Regulation of Social and Labor Relations.

3. The sectoral qualifications framework of the field of "Education", approved by the Minutes of the meeting of the sectoral Commission of the Ministry of Education and Science of the Republic of Kazakhstan on social partnership and regulation of social and labor relations in the field of education and science dated November 27, 2019 No. 3.

4. State Mandatory Standard of Higher and Postgraduate Education (Order No. 66 of the Minister of Science and Higher Education of the Republic of Kazakhstan dated February 20, 2023).

5. 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 August 12, 2022 No. 309.

6. Rules for the organization of the educational process on credit technology of education in organizations of higher and (or) postgraduate education, approved by the Order of the Minister of the Ministry of Education and Science of the Republic of Kazakhstan No. 152 dated 20.04.2011. (with additions and amendments dated April 04, 2023 No. 145).

7. Classifier of training areas with higher and postgraduate education, approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569 (with amendments and additions as of June 05, 2020).

8. The algorithm of inclusion and exclusion of educational programs in the Register of educational programs of higher and postgraduate education, approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated December 4, 2018 No. 665 (with additions and amendments as of December 23, 2020 No. 536).

9. WI-ALT-33 «Regulations on the procedure for developing the educational program of higher and postgraduate education».

10. Professional standard: "Railway transportation of goods: freight and commercial work (station level)", NPP RK "Atameken", approved by the order № 256 from 20.12.2019.

11. Professional standard: "Activity of bus stations and bus terminals", NPP RK "Atameken", approved by order №256 of 20.12.2019.

12. Professional standard: "Organisation of station work", NPP RK "Atameken", approved by order №256 of 20.12.2019.

13. Professional standard: «Dispatch regulation on railway transport (line level)», NPP RK "Atameken", approved by order №256 of 20.12.2019.

14. Professional standard: "Cargo transportation by road transport", NPP RK "Atameken", approved by the order №256 of 20.12.2019.

15. Professional standard: "Logistics of passenger transportation", NPP RK "Atameken", approved by the order №256 of 20.12.2019.

16. Professional standard: "Organisation of professional training of personnel involved in road freight transportation", NPP RK "Atameken", approved by the order №136 from 01.09.2023.

17. Professional standard: "Organisation of professional training of personnel involved in road passenger transportation", NPP RK "Atameken", approved by the order №136 from 01.09.2023.

18. Professional standard: "Ensuring the safety of buses", NPP RK "Atameken", approved by the order №136 from 01.09.2023.

19. Professional standard: "Periodic technical inspection of motor vehicles", NPP RK "Atameken", approved by the order №136 from 01.09.2023.

3 PASSPORT OF THE EDUCATIONAL PROGRAM

№	Name	Note
1	**Field name**	№ 6B07100156
2	Registration number	6B07 Engineering, manufacturing, and construction industries
3	Code and classification of the field of education	6B071 Engineering
4	Code and classification of training areas	B265 Railway transport and technology
5	Code and group of educational programs	Transportation process management and railway operation
6	Name of the educational program	New
7	Type of educational program	Training of specialists who are ready for professional activities in the field of transportation process management, operation, and maintenance of railway transport, and who are able to apply modern technologies and management methods to ensure the safety, reliability, efficiency, and sustainable development of the railway industry.
8	ISCED level	6
9	Level according to the NQF	6
10	Level according to the IQF	6
11	Distinctive features of the EP	Нет
	Partner University (JEP)	
	Partner University (Two-degree EP)	
12	Form of training	full-time
13	language of education	Kazakh, Russian
14	Volume of credits	241
15	Academic degree awarded	Bachelor of Engineering and Technology in the Educational Program "Transportation Process Management and Railway Operation"
16	Availability of an appendix to the license for the direction of training	KZ87LAA00036465 dated 28.06.2024
17	Availability of EP accreditation	-
	Name of the accreditation body	-
	Validity period of accreditation	-

4 THE GRADUATE'S COMPETENCE MODEL

Objectives of the educational program:

1. Formation of a personality capable of self-improvement and professional growth, with a broad range of humanitarian and natural science knowledge and interests.

2. Formation of the ability to critically rethink accumulated experience, to change the profile of one's professional activity if necessary, to be aware of the social significance of one's future profession, and to have a high level of motivation for performing professional activities.

3. Formation of the competence to search for and implement effective methods of managing operational work aimed at reducing the turnover time of a car, increasing the section speed, and reducing operational costs.

4. Developing the skills of preventing traffic safety violations, monitoring the technical condition of rolling stock and infrastructure, and promptly responding to incidents.

5. Promoting the development of teamwork skills, effective communication between various services (traffic, commerce, locomotive maintenance, and infrastructure), and the ability to make managerial decisions in high-uncertainty environments.

6. Preparing graduates to conduct technical and economic analysis, provide comprehensive justification for decisions made and implemented in the field of transport organization and operation, apply the results in practice, and strive for self-development and improvement of their qualifications and skills.

7. Promoting the readiness of graduates to use natural resources economically and safely, and implementing marketing and management methods in the management of transportation processes and the operation of railways.

The purpose of the educational program: Training of specialists who are ready for professional activities in the field of transportation process management, operation, and maintenance of railway transport, and who are able to apply modern technologies and management methods to ensure the safety, reliability, efficiency, and sustainable development of the railway industry.

Learning outcomes:

LO1 – Demonstrate a comprehensive worldview, broad erudition, critical thinking, and readiness for effective social adaptation and professional activity, based on a deep understanding of the key stages of Kazakhstan's history, philosophical concepts, sociocultural processes, political systems, and psychological patterns. Have a well-developed civic position based on knowledge of the fundamentals of law and anti-corruption culture, as well as sustainable skills for a healthy lifestyle and physical development.

LO2 – Apply language skills to solve problems of managing transportation processes and operating railways at a level that allows for full-fledged interaction in a professional environment, effectively using professional terminology and knowledge in the state, Russian, and foreign languages.

LO3 – To integrate the principles of information and communication technologies, programming, and artificial intelligence to develop intelligent control systems and transport process modeling, ensuring digital inclusion and applying Smart City technologies to improve the efficiency and safety of passenger transportation by rail.

LO4 – To assess environmental risks and threats to life safety in transport, as well as to design and implement sustainable technological solutions and occupational safety measures aimed at minimizing the negative impact on the environment and ensuring safe working conditions.

LO5 – To evaluate the effectiveness of management decisions in the field of railway transport from the perspective of the green economy and ecology, and to develop sustainable development strategies for the industry by applying financial analysis and time management skills to achieve the set goals.

LO6 - Recognize patterns and relationships between mathematical and physical principles and apply them to model and optimize railway management and operation processes, using scientific research methods to justify the choice of models and methods, interpret results, and assess their reliability.

LO7 – To manage the operational work of railway stations, hubs, and sections by optimizing technological processes, applying methods of organizing car traffic, operational management of train traffic, and technical regulation based on modern information technologies, automated control systems, and communication systems to ensure safety, regularity of the transportation process, and rational use of resources.

LO8 – Analyze the principles of building and managing transport and logistics systems, including the interaction of various modes of transport and terminal technologies. Develop strategies to improve efficiency, security, and automation of processes using smart technologies (RFID, IoT, sensor networks) and modern supply chain management methods aimed at optimizing transport flows, improving customer service, and reducing logistics costs.

LO9 – Optimize solutions to improve the efficiency and safety of railway transport, taking into account the design and operational features of the system, as well as evaluate the interaction of rolling stock, infrastructure, and technological processes at stations and hubs.

LO10 – To plan and manage passenger transportation by various modes of transport, using methods of passenger flow formation and regulation, optimizing the route network, and improving the quality of service. To operate the knowledge of the regulatory framework and the skills of organizing the work of passenger complexes and high-speed highways, taking into account the use of innovative technologies.

LO11 – Research the regulatory framework, technological processes, and commercial aspects of freight transportation by rail, including the operation of junction stations and access roads, and develop and optimize solutions to improve the efficiency, safety, and customer focus of freight and commercial activities in the railway transport sector.

LO12 - To create and implement comprehensive solutions for improving traffic safety and preventing illegal interference in railway transport, by analyzing regulatory and technical requirements for transport security, traffic management systems, and passenger protection, taking into account the requirements of technical regulation, in order to ensure the reliable and safe operation of railway transport and protect the lives and health of citizens.

Area of professional activity: management of railway transportation processes and railway operation; auxiliary and additional transportation activities.

Objects of professional activity:

- processes of organization and management of operational activities of passenger and freight rail transport;
- accounting, reporting and technical documentation;
- primary labor collectives.

Types of professional activity:

- management of the transportation process in railway transport;
- organization of service in railway transport;
- organization of transport and logistics activities in railway transport.

Functions of professional activity:

- organization, management, and logistics;
- design;
- service and operation.

List of specialist positions:

- Chief Specialist/Engineer for Traffic Safety (by Levels);
- Regional Traffic Safety Auditor (by Farms);
- Regional Chief Traffic Safety Auditor;
- Head of the Traffic Safety Service/Department in Railway Transport;
- Head of the Operational and Administrative Department;
- Deputy Head of the Operational and Administrative Department;
- Head of the Container Site;
- Transport Services Manager;
- Engineer for Container Transportation;
- Head of a Class 3 Station;
- Deputy Head of the Station (for Operational Work);
- Head of the Station of the Extra-Class Station (Class 1-2);
- Chief Engineer of the Extra-Class Station (Class 1-2);
- Head of the Department of Organization and Conditions of Transportation;
- Engineer for the Organization of Freight Transportation;
- Manager Responsible for Traffic Safety;

- Head of the Passenger Transportation Service;
- Specialist in the Development of Passenger Transport Infrastructure;
- Lead Engineer (for Freight and Commercial Operations);
- Freight Dispatcher;
- Deputy Head of the Station for Freight and Commercial Operations;
- Manager of carriages (containers);
- Manager of carriages (containers) for customers.

Professional certificates obtained at the end of training not provided for

Requirements for the previous level of education: general secondary, vocational, post-secondary, higher education (bachelor's degree).

In the course of training, students undergo various types of professional practice:

- educational;
- production;
- production (pre - graduation)

Educational practice. Organisation of educational practice is directed on reception of primary professional skills and skills, acquaintance with the basic objects of transport, areas of professional activity and profiles of training and consolidation of passed theoretical material. Within the framework of training practice are held field technical classes on the basis of the branch of the department at the production (Almaty branch of the railway, stations Almaty-1, Almaty-2, transport enterprises), as well as a visit to the museum of transport. Evaluation is carried out by defence of the report on practice.

Production practice (1).

The main objectives of the industrial practice are: consolidation of theoretical knowledge and practical skills on the chosen educational program in a production environment, gaining experience in organizational work, obtaining a working specialty, the formation of practical skills and competencies in the process of mastering the bachelor's program.

Pre-graduate/Production practice (2).

The purpose of the practice for bachelors is to ensure the relationship between the theoretical knowledge gained in the assimilation of the chosen educational program and practical activities. The objectives of this practice are to consolidate and deepen the theoretical knowledge gained by students in the learning process, collect information for writing a final qualifying work, study best practices at the enterprise, as well as gain experience in independent research work, mastering a variety of methods of scientific work. It is carried out in the bases of practices at enterprises according to this educational program.

Final certification. It is aimed at determining the level of professional training of the graduate on the educational programme. Final certification is realised in the form of final certification comprehensive examination or performance and defence of the final qualification research work on a topical or problematic topic (individual or group). On the basis of this assessment, a conclusion is made about the effectiveness of educational activities and the quality of specialist training.

5. MATRIX OF CORRELATION OF LEARNING OUTCOMES ACCORDING TO THE EDUCATIONAL PROGRAM WITH ACADEMIC DISCIPLINES/MODULES

№	Name of the discipline	Number of credits	Matrix of correlation of learning outcomes according to the educational program with academic disciplines											
			LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11	LO12
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
GENERAL EDUCATION DISCIPLINES CYCLE (GED):														
Module of General Educational Competencies														
1	History of Kazakhstan	5	+											
2	Philosophy	5	+											
3	Physical Education	8	+											
Module of Language Competencies														
4	Foreign Languagем	10		+										
5	Kazakh (Russian) Language	10		+										
Module of Socio-Political Competencies														
6	Sociology	2	+											
7	Culturology	2	+											
8	Political Science	2	+											
9	Psychology	2	+											
Module of Information Technology and Artificial Intelligence														
10	Information and Communication Technologies	5			+									
Module of Economic and Managerial Competencies														
11	Environmentally Sustainable Technologies	5				+								
	Green Economy and Sustainable Entrepreneurship						+							
	Fundamentals of Financial Literacy						+							
	Digital Inclusion				+									
	Basics of Law and Anti-Corruption Culture		+											
	Fundamentals of scientific research							+						
BASIC DISCIPLINES CYCLE (BD):														
Module of Natural Science Competencies														
12	Engineering Mathematics 1	5						+						
13	Engineering Mathematics 2	5						+						
14	Applied Physics	5						+						
15	Theoretical mechanics	4						+						
Professional Module														
16	Automation, telemechanics, and transport communications	4							+					
17	The general course of transport	6								+				
18	Interaction of modes of transport	5								+				
19	Occupational safety and health	5				+								
20	Modern rolling stock and railway traction equipment	5									+			
21	Transport and logistics systems	6								+				
22	Construction and operation of the railway track	6									+			
Module of Information Technology and Artificial Intelligence														
23	Engineering graphics and	4			+									

	computer modeling													
24	Python programming basics	3			+									
Practice-Oriented Module														
25	Professionally oriented foreign language	3		+										
26	Educational Practice	2												
Professional Module														
27	Organization of wagon traffic on the railway network	6							+					
	Organization of passenger traffic on the railway network											+		
28	Rules for the transportation of goods by rail	6											+	
	Regulatory and Legal Support for Passenger Transportation by Rail											+		
29	Technical Regulation and Traffic Safety in Railway Transport	7												+
	Regulatory and legal support for passenger transportation by rail													+
30	Intelligent technologies in the operation of a transport hub	5								+				
	Technology of transport and transfer hubs											+		
Module of Economic and Management Competencies														
31	Managerial Economics	3					+							
	Time-management						+							
PROFILE DISCIPLINES CYCLE (PD):														
Professional Module														
32	Management of operational work of railway sections	6							+					
33	Modern technologies for managing railway stations and hubs	6							+					
34	Railway stations and junctions 1	6									+			
35	Railway stations and junctions 2	6									+			
36	Organization and management of passenger transportation	5										+		
37	Technical regulation and optimization of railway transportation	5							+					
38	Cargo and commercial operations on rail transport	6											+	
Practice-Oriented Module														
39	Transport safety and train traffic management systems	6												+
40	Industrial Practice 1	5		+	+	+	+	+	+	+	+	+	+	+
41	Industrial (Pre-graduation) Practice 2	5		+	+	+	+	+	+	+	+	+	+	+
Module of Information Technology and Artificial Intelligence														
42	Applied artificial intelligence in transportation systems	6			+									
	Intelligent passenger transportation management systems on rail transport				+									
Professional Module														

43	Технология работы станции примыкания и подъездных путей	5											+	
	Технология работы пассажирских станций											+		
Practice-Oriented Module														
44	Technology of the junction station and access roads	5								+				
	Passenger station operation technology											+		
Sustainable Development and Standards in Transportation Engineering / Module of the Additional Educational Program														
45	Application of Smart City technology	3			+									
	Minor program 1:				+									
46	Automation of Logistics Processes (RFID, IoT, Sensor Networks)	3								+				
	Minor program 2:									+				
47	Organization of high-speed traffic on transport	3										+		
	Minor program 3:											+		
48	FINAL CERTIFICATION	8	+	+	+	+	+	+	+	+	+	+	+	+
ADDITIONAL TYPES OF TRAINING (ATT)														
Module of Personal Competencies														
49	Service to Society	1											+	
	Business Communications													+

6. STRUCTURE OF THE BACHELOR'S DEGREE PROGRAM

№ п/п	The name of the cycles of disciplines	Total labor intensity	
		in academic hours	in academic credits
1	Cycle of general education disciplines (GED)	**1680**	**56**
1)	**Required component**	**1530**	**51**
	History of Kazakhstan	150	5
	Philosophy	150	5
	Foreign language	300	10
	Kazakh (Russian) language	300	10
	Information and communication technologies	150	5
	Module of socio-political knowledge (sociology, political science, cultural studies, psychology)	240	8
	Physical Culture	240	8
2)	**University component and (or) elective component**	**150**	**5**
2	Cycle of basic and specialised disciplines (DB, PD)	at least 5280	at least 176
1)	**University component and (or) elective component**		
2)	**Professional practice**		
3	Additional types of training (DVOs)		
1)	**Elective component**		
4	Final certification	at least 240	at least 8
	Total	**at least 7200**	**at least 240**

7. THE CURRICULUM FOR THE ENTIRE PERIOD OF STUDY

ALT University named after Mukhamedzhan Tynyshpayev JSC

CURRICULUM

Form of study: full-time

Direction of training:
6B071 Engineering

Duration of study: 3 years

Group of educational programs:
B265 Railway transport and technology

Name of the educational program:
6 B07186 - Transportation process management and railway operation

Admission: 2025

Degree: Bachelor of Engineering and Technology

APPROVED
By the decision of the Academic Council
ALT University named after Mukhamedzhan
dated March 27, 2025 Protocol No. 8
Chairman of the Academic Council
Imanbayeva M.S.

№	Discipline code	Naming of cycles and disciplines	Overall labor intensity		Form of control, trimester		Amount of study load, hours						Distribution by trimester									Securing a position at the department
								Contact					1st course			2nd course			3rd course			
			In academic hours	In academic credits	Exam	КП (КР)	Total hours	lectures	practical	laboratory	IWST	IWS	1 10 weeks	2 10 weeks	3 10 weeks	4 10 weeks	5 10 weeks	6 10 weeks	7 10 weeks	8 10 weeks	9 10 weeks	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.	GENERAL EDUCATION DISCIPLINES CYCLE (GED):																					
1.1.	Required component:		1530	51			1530	80	440	0	168	842	6	11	6	8	11	2	7	0	0	
M1	Module of General Educational Competencies																					
1.1.1.	23-0-B-OK-IK	History of Kazakhstan	150	5	5		150	20	20		8	102					5					SHD&PE
1.1.2.	23-0-B-OK-Fil	Philosophy	150	5	7		150	20	20		8	102							5			SHD&PE
1.1.3.	23-0-B-OK-FK	Physical Education	240	8	1,2, 3,4		240		40		32	168	2	2	2	2						SHD&PE
M2	Module of Language Competencies																					
1.1.4.	23-0-B-OK-IYa	Foreign Languagem	300	10	1,2, 3,4,5		300		200		40	60	2	2	2	2	2					LE
1.1.5.	23-0-B-OK-K(R)Ya	Kazakh (Russian) Language	300	10	1,2, 3,4,5		300		100		40	160	2	2	2	2	2					LE
M3	Module of Socio-Political Competencies																					
1.1.6.	23-0-B-OK-Sotz	Sociology	240	8	4,5,6, 7		240	5	10		8	37					2					SHD&PE
	23-0-B-OK-Kul	Culturology						5	10		8	37				2						SHD&PE
	23-0-B-OK-Pol	Political Science						5	10		8	37							2			SHD&PE
	23-0-B-OK-Psi	Psychology						5	10		8	37						2				SHD&PE
M4	Module of Information Technology and Artificial Intelligence																					
1.1.7.	23-0-B-OK-IKT	Information and Communication Technologies	150	5	2		150	20	20		8	102		5								ICT
1.2.	Elective component:		150	5			150	20	20	0	8	102	0	0	0	0	0	5	0	0	0	
M5	Модуль экономическо-управленческих компетенций																					
1.2.1.	25-0-B-KV-EUT	Environmentally Sustainable Technologies	150	5	6		150	20	20		8	102						5				MV&LS
	25-0-B-KV-ZEUP	Green Economy and Sustainable Entrepreneurship																				TSB
	24-0-B-KV-OFG	Fundamentals of Financial Literacy																				TSB
	25-0-B-KV-CI	Digital Inclusion																				ICT
	23-0-KV-OPAK	Basics of Law and Anti-Corruption Culture																				SHD&PE
	25-0-KV-ONI	Fundamentals of scientific research																				SHD&PE
	TOTAL for the GED cycle:		1680	56			1680	100	460	0	176	944	6	11	6	8	11	7	7	0	0	
2.	THE CYCLE OF BASIC AND PROFILE DISCIPLINES (BD, PD):																					
2.1.	BASIC DISCIPLINES CYCLE (BD):																					
2.1.1.	University component:		2040	68			2040	180	250	10	203	1337	20	17	19	4	0	3	0	5	0	
M6	Module of Natural Science Competencies																					
2.1.1.1	24-0-B-VK-IM1	Engineering Mathematics 1	150	5	1		150	10	20		15	105	5									GE
2.1.1.2	24-0-B-VK-IM2	Engineering Mathematics 2	150	5	2		150	10	20		15	105		5								GE
2.1.1.3	25-0-B-VK-PF	Applied Physics	150	5	2		150	10	10	10	15	105		5								GE
2.1.1.4	25-B-VK/KV-TMeh	Theoretical mechanics	120	4	2		120	10	20		15	75		4								TC
M7	Professional Module																					
2.1.1.5	25-B-VK-ATiST	Automation, telemechanics, and transport communications	120	4	4		120	20	10		15	75				4						MV&LS
2.1.1.6	25-B-VK-OKT	The general course of transport	180	6	2		180	20	20		15	125	6									TSB
2.1.1.7	23-B-VK-VVT	Interaction of modes of transport	150	5	1		150	20	10		15	105	5									TSB
2.1.1.8	25-O-B-VK-OTBZhd	Occupational safety and health	150	5	7		150	10	20		15	105								5		MV&LS
2.1.1.9	25-B-VK-SPSiTSZhD	Modern rolling stock and railway traction equipment	150	5	3		150	20	10		15	105			5							ПС
2.1.1.10	25-B-VK-TLS	Transport and logistics systems	180	6	3		180	20	20		15	125			6							TSB
2.1.1.11	25-B-VK-UEZhP	Construction and operation of the railway track	180	6	3		180	20	20		15	125			6							TC
M4	Module of Information Technology and Artificial Intelligence																					
2.1.1.12	25-0-B-VK-IGKM	Engineering graphics and computer modeling	120	4	1		120	10	20		15	75	4									ICT
2.1.1.13	25-0-B-VK-OPP	Python programming basics	90	3	2		90		10		15	65		3								ICT
M8	Practice-Oriented Module																					
2.1.1.14	24-0-B-VK-POIYa	Professionally oriented foreign language	90	3	6		90		40		8	42						3				LE
2.1.1.15	23-0-B-VK-UP	Educational Practice	60	2	3		60								2							TSB
2.1.2	Elective component:		810	27			810	100	80	0	75	555	0	0	0	12	0	3	0	7	5	
M7	Professional Module																					
2.1.2.1	25-B-KV-OVSZhD	Organization of wagon traffic on the railway network	180	6	1		180	20	20		15	125				6						TSB
	25-B-KV-OPSZhD	Organization of passenger traffic on the railway network																				TSB

2.1.2.3	25-B-KV-PPGZhT	Rules for the transportation of goods by rail	180	6	4		180	20	20		15	125				6						TSB
	25-B-KV-NPOPPZhT	Regulatory and Legal Support for Passenger Transportation by Rail																				TSB
2.1.2.4	25-B-KV-TRiBDZhT	Technical Regulation and Traffic Safety in Railway Transport	210	7	8		210	30	20		15	145								7		TSB
	25-B-KV-OTBPZhT	Regulatory and legal support for passenger transportation by rail																				TSB
M4	Module of Information Technology and Artificial Intelligence																					
2.1.2.5	25-B-KV-ITRTU	Intelligent technologies in the operation of a transport hub	150	5	9		150	20	10		15	105									5	TSB
	25-B-KV-TRTPU	Technology of transport and transfer hubs																				
M5	Module of Economic and Management Competencies																					
2.1.2.6	23-0-B-KV-UE	Managerial Economics	90	3	6		90	10	10		15	55						3				TSB
	23-0-B-KV-TM	Time-management																				
	TOTAL for the BD cycle:		2850	95			2850	280	330	10	278	1892	20	17	19	16	0	6	0	12	5	
2.2.	PROFILE DISCIPLINES CYCLE (PD):																					
2.2.1.	University component:		1680	56			1680	160	120	20	120	960	0	0	0	6	11	16	6	12	5	
M7	Professional Module																					
2.2.1.1	25-B-VK-UERZhU	Management of operational work of railway sections	180	6	7		180	20	10	10	15	125							6			TSB
2.2.1.2	25-B-VK-STUZhSU	Modern technologies for managing railway stations and hubs	180	6	6		180	20	10	10	15	125						6				TSB
2.2.1.3	25-B-VK-ZhSU1	Railway stations and junctions 1	180	6	4		180	20	20		15	125				6						TSB
	25-B-VK-ZhSU2	Railway stations and junctions 2	180	6	5		180	20	20		15	125					6					TSB
2.2.1.4	25-B-VK-OiUPP	Organization and management of passenger transportation	150	5	6		150	20	10		15	105						5				TSB
	25-B-VK-TNiOPZhT	Technical regulation and optimization of railway transportation	150	5	8		150	20	10		15	105					5					TSB
2.2.1.5	25-B-VK-GlKRZhT	Cargo and commercial operations on rail transport	180	6	5		180	20	20		15	125								6		TSB
M8	Practice-Oriented Module																					
2.2.1.6	25-B-VK-TBiSUDP	Transport safety and train traffic management systems	180	6	8		180	20	20		15	125								6		TSB
2.2.1.7	25-0-B-VK-PPr1	Industrial Practice 1	150	5	6		150											5				TSB
2.2.1.8	25-0-B-VK-PPr2/PdPr	Industrial (Pre-graduation) Practice 2	150	5	9		150														5	TSB
2.2.2	Elective component:		750	25			750	90	70	0	90	530	0	0	0	0	0	0	14	3	8	
M4	Module of Information Technology and Artificial Intelligence																					
2.2.2.1	25-B-KV-PIITS	Applied artificial intelligence in transportation systems	180	6	7		180	20	20		15	125							6			TSB
	25-B-KV-ISUPPZhT	Intelligent passenger transportation management systems on rail transport																				
M7	Professional Module																					
2.2.2.2	25-B-KV-TRSPPP	Technology of the junction station and access roads	150	5	7		150	20	10		15	105							5			TSB
	25-B-KV-TRPS	Passenger station operation technology																				
M8	Practice-Oriented Module																					
2.2.2.3	25-B-KV-TRTT	Technology of operation of transport terminals	150	5	9		150	20	10		15	105									5	TSB
	25-B-KV-IIPK	Innovative infrastructure of the passenger complex																				
M9	Sustainable Development and Standards in Transportation Engineering / Module of the Additional Educational Program																					
2.2.2.4	25-B-KV-PTUG	Application of Smart City technology	90	3	7		90	10	10		15	65							3			TSB
	24-0-B-KV-MN1	Minor program 1:																				
2.2.2.5	25-0-B-KV-ALP	Automation of Logistics Processes (RFID, IoT, Sensor Networks)	90	3	8		90	10	10		15	65								3		TSB
	24-0-B-KV-MN2	Minor program 2:																				
2.2.2.6	25-B-KV-OVDT	Organization of high-speed traffic on transport	90	3	9		90	10	10		15	65									3	TSB
	24-0-B-KV-MN3	Minor program 3:																				
	TOTAL for the PD cycle:		2430	81			2430	250	190	20	210	1490	0	0	0	6	11	16	20	15	13	
	TOTAL by BD and PD cycles:		5280	176			5280	530	520	30	488	3382	20	17	19	22	11	22	20	27	18	
3.	ADDITIONAL TYPES OF TRAINING (ATT)																					
M10	Module of Personal Competencies																					
3.1	24-0-B-KV-DVO-SO	Service to Society	30	1	1		30		10		5	15	1									TSB
	24-0-B-KV-DVO-BK	Business Communications																				
	TOTAL FOR THE THEORETICAL COURSE OF STUDY (TCS):		6960	232	0	0	6960	630	980	30	664	4326	26	28	25	30	22	29	27	27	18	
4.	23-0-B-VK-IA	FINAL CERTIFICATION	240	8																	8	TSB
	TOTAL FOR THE ENTIRE PERIOD OF STUDY:		7230	241	1	0	6990	630	990	30	669	4341	27	28	25	30	22	29	27	27	26	241
														80			81			80		

AGREED:

Vice-Rector for Academic Affairs _____ Baigaraev N.A.

DEVELOPED:

Director of the "TC" Institute _____ Abdreshov S.A.

Director of the "LB" Institute _____ Musaeva G.S.

Head of the "TSB" Department _____ Musalieva R.D.

8. CATALOG OF DISCIPLINES OF THE UNIVERSITY COMPONENT

EDUCATIONAL PROGRAMS **6B07186 - Transportation process management and railway operation**

Education level: Bachelor's degree **Duration of study: 3 years** **Year of admission: 2025 y.**

Cycle	Component	Total labor intensity	Total labor intensity		Semester	Learning outcome	Brief description of the discipline	Prerequisites	Post-requisites
			in academic hours	in academic credits					
1	2	3	4	5	6	7	8	9	10
BD	UC	Engineering Mathematics 1	150	5	1	LO6	The discipline studies the basic concepts of higher mathematics and its applications. The purpose of the course is to master the mathematical apparatus for solving theoretical and applied problems in a specific field, to gain an understanding of mathematical modeling and the interpretation of obtained solutions. The course includes elements of linear algebra and analytical geometry, an introduction to mathematical analysis, and differential calculus of functions of one and several variables.	Disciplines of the school component	Engineering Mathematics 2, Information and Communication Technologies, Fundamentals of Scientific Research, Information and Communication Technologies, Technical Regulation and Optimization of Railway Transportation, Railway Stations and junctions 1, Railway Stations and junctions 2
BD	UC	Engineering Mathematics 2	150	5	2	LO6	The course aims to provide students with the mathematical knowledge and skills necessary for studying related natural sciences, professional disciplines, and mathematical modeling and research in their professional activities. The course covers topics such as integral calculus of functions of one and several variables, ordinary differential equations, and series theory. Special attention is given to the application of mathematical methods to solve engineering problems.	Engineering Mathematics 1	Theoretical Mechanics, Fundamentals of Scientific Research, Information and Communication Technologies, Technical Regulation and Optimization of Railway Transportation, Railway Stations and junctions 1, Railway Stations and junctions 2
BD	UC	Automation, telemechanics, and	120	4	4	LO7	Formation of knowledge and skills in automation, telemechanics, and communication systems, which establish the procedure for operating railway	Applied Physics	Transport safety and train traffic management

		transport communications					transport in accordance with traffic safety in all situations, including emergency situations, using modern traffic control systems. Study of methods for evaluating the performance, technical characteristics, and technical condition of automation and telemechanics devices, and justification of the selection of standard devices for specific applications		systems
BD	UC	The general course of transport	180	6	2	LO8	The discipline is an introductory course that provides students with a comprehensive understanding of the transport system, its structure, functions, and role in the economy. The course covers various modes of transport, their characteristics, advantages, and disadvantages, as well as the interaction of different modes of transport in a unified transport system and the prospects for the development of the transport system in the context of globalization and digitalization of the economy.	Disciplines of the school component	Training practice, Transport and logistics systems, Railway stations and junctions 1
BD	UC	Interaction of modes of transport	150	5	1	LO8	The discipline is devoted to the study of the principles of the organization and management of transport processes in the interaction of different modes of transport in a unified transport system. The course examines the theoretical and practical aspects of the organization of mixed (multimodal) transportation, as well as the issues of coordinating the work of different modes of transport to improve the efficiency and reliability of transport services. The discipline studies the principles of building a unified transport system, the legal and economic aspects of the interaction of modes of transport, and the use of information technologies in managing the interaction of modes of transport.	Disciplines of the school component	Training practice, Transport and logistics systems, Railway stations and junctions 1
BD	UC	Occupational safety and health	150	5	7	LO4	The discipline focuses on teaching students the knowledge and skills necessary to ensure safe working and living conditions. It covers the legal and organizational aspects of occupational safety, methods of assessing and managing occupational risks, individual and collective protective measures, emergency prevention, and measures to reduce the risk of injuries and occupational diseases. The discipline emphasizes the importance of creating a safe working environment, complying with occupational safety regulations, and fostering a culture of safety in professional activities.	Environmental sustainable technologies, Construction and operation of the route	Innovative infrastructure of the passenger complex, Production practice 2, Organization of high-speed traffic, and Intelligent technologies in the transport hub
BD	UC	Construction and operation of the railway track	180	6	3	LO9	The discipline covers all aspects related to the design, maintenance, repair, and diagnostics of railway tracks, providing the necessary knowledge and skills to ensure the safe and reliable operation of railway infrastructure. The course aims to provide in-depth knowledge about the design and operation of railway tracks, as well as practical skills to ensure their reliability, safety, and durability.	Applied Physics, Theoretical Mechanics	Occupational Health and Safety, Management of Railway Sections
BD	UC	Engineering graphics and computer modeling	120	4	1	LO3	The course covers the principles of technical drawing and engineering graphics, as well as modern methods of 3D modeling using specialized software, which are aimed at developing skills in designing and visualizing technical objects, creating digital models and schemes, drawing plans, modeling structures, and analyzing their parameters to solve engineering problems.	Disciplines of the school component	Information and Communication Technologies, Railway Stations and junctions 1, Railway Stations and junctions s 2
BD	UC	Python programming basics	90	3	2	LO3	The discipline studies the syntax and semantics of the Python language, algorithmization and program design, program structuring, and solving problems related to artificial intelligence. Students learn machine learning methods, data processing, and the development of intelligent systems, as well as analyze the application of AI in various fields, developing their professional competencies in programming and the fundamentals of artificial intelligence.	Engineering Math1	Automation of logistics processes (RFID, IoT, sensor networks), Digital inclusion, Application of Smart City technology
BD	UC	Professionally	90	3	6	LO2	Formation and development of foreign language professional communicative	Foreign language	Automation of logistics

		oriented foreign language					competence necessary for professional activity, possession of a professional foreign language for written and oral information exchange, development of reading and understanding skills of professional literature in a foreign language, development of the ability to express one's thoughts in oral and written form in situations of professional and business communication.		processes (RFID, IoT, sensor networks), Organization of high-speed traffic on transport
BD	UC	Educational Practice	60	2	3	LO1, LO2, LO11, LO12	The organization of training practice is aimed at providing bachelors with an introduction to the main areas, objects, and fields of professional activity, as well as with the consolidation of theoretical material and the organization of introductory excursions at the department's branch for this educational program.	General course of transport, Interaction of modes of transport	Industrial practice 1
PD	UC	Management of operational work of railway sections	180	6	7	LO7	The discipline covers all aspects related to the design, maintenance, repair, and diagnostics of railway tracks, providing the necessary knowledge and skills to ensure the safe and reliable operation of railway infrastructure. The course aims to provide in-depth knowledge about the design and operation of railway tracks, as well as practical skills to ensure their reliability, safety, and durability.	Industrial Practice 1, Track Construction and Operation, Organization of Car Flows on the Railway Network, Technical Regulation and Optimization of Railway Transportation, Modern Technologies for Managing Railway Stations and Nodes	Transport security and train traffic control systems, High-speed transport organization
PD	UC	Modern technologies for managing railway stations and hubs	180	6	6	LO7	The discipline is focused on studying the principles of organization and operational management of technological processes that take place at railway stations and hubs. It covers the technology of performing basic station operations, including the reception, departure, and passage of trains of various categories, as well as shunting operations, disbanding, and forming trains. The discipline also focuses on the development and optimization of technological processes aimed at reducing the downtime of rolling stock, increasing the capacity and processing capabilities of stations and hubs, and utilizing advanced information technologies and automated systems.	Railway Stations and Nodes 1, Railway Stations and Nodes 2, Organization of Car Flows on the Railway Network, Organization of Passenger Flows on the Railway Network	Management of railway sections, Transport security, and train traffic control systems
PD	UC	Railway stations and junctions 1	180	6	4	LO9	Acquiring comprehensive knowledge about the structure and technical equipment of railway stations, including the structure of the trackbed, types of longitudinal and transverse profiles, and features of track development; gaining practical skills in selecting the optimal location of station devices, taking into account the requirements for dimensions, determining the types of track connections and intersections, and compiling lists of tracks, switches, buildings, and structures in order to solve specific problems related to the design and operation of railway stations.	Engineering Mathematics1, Engineering Mathematics2, Engineering Graphics and Computer Modeling, General Transport Course, Interaction of Transport Modes	Industrial Practice 1, Modern Technologies for Managing Railway Stations and junctions, Railway Stations and junctions 2

PD	UC	Railway stations and junctions 2	180	6	5	LO9	The course covers the classification and placement of technical stations on the railway network, the study of typical layouts of sectional and marshalling stations, as well as the principles of their design and reconstruction. The course also provides skills in designing and justifying solutions for improving the design, technical equipment, and operational technology of railway stations. The course includes methods of group design and guest lectures by industry experts.	Engineering Mathematics 1, Engineering Mathematics 2, Engineering Graphics and Computer Modeling, Railway Stations and Nodes 1	Industrial Practice 1, Modern Technologies for Managing Railway Stations and junctions
PD	UC	Organization and management of passenger transportation	150	5	6	LO10	The discipline focuses on studying the theoretical and practical aspects of planning, organizing, and managing the process of passenger transportation by various modes of transport, with a particular emphasis on rail transport as a key element. The discipline covers various types of passenger transportation (long-distance, local, suburban, and international), their characteristics and requirements for organization, principles of developing train schedules, forming trains, determining the required number of rolling stock, and developing route networks.	Organization of passenger traffic on the railway network	Innovative infrastructure of the passenger complex, Technology of transport terminals, Technology of transport and transfer hubs
PD	UC	Technical regulation and optimization of railway transportation	150	5	8	LO7	The discipline studies the principles of rational use of technical means, increasing the efficiency of operational work, and reducing the cost of transportation while ensuring a high level of traffic safety. It examines systems of technical regulation, including the classification of technical standards (time, resource consumption, use of rolling stock, and capacity), methods for their development and calculation based on the analysis of technological processes, time-keeping observations, and statistical data. Attention is paid to the relationship between technical standards and transportation planning, the development of train schedules, and the routing of transportation.	Engineering Mathematics1, Engineering Mathematics2, Modern Rolling Stock and Railway Tractor Equipment	Industrial Practice 1, Management of Railway Sections
PD	UC	Freight and commercial operations on rail transport	180	6	5	LO11	The discipline is devoted to the study of the organization and management of freight transportation by rail, with a focus on commercial aspects and customer interaction. The course covers the technology of freight operations at stations, the procedure for issuing transportation documents, the basics of transport legislation, as well as marketing, logistics, and customer service issues in the field of freight transportation.	Rules for the transportation of goods by rail	Industrial (pre-graduation) practice 2, Intelligent technologies in the operation of a transport hub, Technology of transport terminal operation
PD	UC	Transport safety and train traffic management systems	180	6	8	LO12	The discipline is dedicated to the study of theoretical and practical aspects of railway transport security, as well as the principles of building and functioning of modern train traffic control systems. The course covers a wide range of issues related to the prevention of terrorist acts and other illegal actions, the protection of critical infrastructure, and the ensuring of train traffic safety through the use of modern control systems.	Industrial Practice 1, Modern Technologies for Managing Railway Stations and Nodes	Industrial (Pre-graduation) Practice 2
PD	UC	Industrial Practice 1	150	5	6	LO2, LO3, LO4, LO5, LO6, LO7, LO8, LO9,	The main objectives of the production practice are to consolidate theoretical knowledge and practical skills in the chosen educational program in production conditions, to gain experience in organizational work, to obtain a working specialty, and to develop practical skills and competencies in the process of mastering the bachelor's program.	Training practice, Railway stations and junctions 1, Railway stations and junctions 2, Technical regulation and optimization of railway	Industrial (Pre-graduation) Practice 2, Management of railway sections, Transport security, and train traffic control systems

						LO10, LO11, LO12		transportation	
PD	UC	Industrial (Pre-graduation) Practice 2	150	5	9	LO2, LO3, LO4, LO5, LO6, LO7, LO8, LO(, LO10, LO11, LO12	The purpose of the practice for bachelors is to ensure a connection between the theoretical knowledge acquired during the study of the chosen educational program and practical activities. The objectives of this practice include consolidating and deepening the theoretical knowledge acquired by students during their studies, collecting information for their final qualifying work, studying best practices at the enterprise, and gaining experience in independent research and the use of various scientific methods. The practice is conducted at the practice bases of the enterprises according to the given educational program.	Occupational Health and Safety, Production Practice 1, Transport Safety and Train Traffic Control Systems, Cargo and Commercial Operations in Railway Transport	Final certification

9. CATALOG OF DISCIPLINES OF THE COMPONENT BY CHOICE

EDUCATIONAL PROGRAMS **6B07186 - Transportation process management and railway operation**

Education level: Bachelor's degree **Duration of study: 3 years** **Year of admission: 2025 y.**

Cycle	Component	Total labor intensity	Total labor intensity		Semester	Learning outcome	Brief description of the discipline	Prerequisites	Post-requisites
			in academic hours	in academic credits					
1	2	3	4	5	6	7	8	9	10
GED	EC 1	Green economy and sustainable entrepreneurship	150	5	6	LO5	The discipline «Green economy and sustainable entrepreneurship» is devoted to the study of environmentally oriented economic models and business strategies aimed at sustainable development. The course examines the concepts of the green economy, ESG (Environmental, Social, Governance) approaches, circular economy, sustainable business models and their impact on global markets	Organization of passenger traffic on the railway network, Organization of wagon traffic on the railway network	Managerial Economics, Time Management, Minor Program 1
GED	EC 1	Basics of Law and Anti-Corruption Culture	150	5	6	LO1	The discipline outlines the fundamental concepts of law, the constitutional structure of the state power of the Republic of Kazakhstan, the rights and freedoms of citizens enshrined in the Constitution, the mechanism and protection of legitimate human interests in case of their violation. The discipline forms students' improvement of public and individual legal awareness and legal culture, as well as a system of knowledge and citizenship on combating corruption as an antisocial phenomenon	Sociology, Cultural Studies	Political Science, Ensuring Passenger Transport Safety on Railway Transport, Final Certification
GED	EC 1	Fundamentals of Financial Literacy	150	5	6	LO5	The discipline is aimed at developing the ability to make informed financial decisions, plan income and expenditures, assess risks and effectively manage their resources in a market economy. It studies the basic knowledge in the sphere of finance and rational management of monetary resources, the concepts of financial system, budget, banking products, crediting, savings, investments, insurance, taxation and protection against financial fraud are considered	Engineering Mathematics 1, Engineering Mathematics 2	Managerial Economics, Time Management, Minor Program 1
GED	EC 1	Digital inclusion	150	5	6	LO3	The discipline «Digital inclusion» is devoted to the study of the principles of ensuring equal access to digital technologies and information for all social groups, including people with disabilities. The course examines barriers to digital inequality, strategies for overcoming them, technologies for adapting the digital environment, and government initiatives to develop an inclusive digital society	Python Programming Fundamentals, Engineering Graphics and Computer Modeling, Information and Communication Technologies	Automation of logistics processes (RFID, IoT, sensor networks), Minor program 3

GED	EC 1	Environmentally sustainable technologies	150	5	6	LO4	The discipline «Environmentally sustainable technologies» studies modern methods and innovative solutions aimed at minimizing the negative impact of human activities on the environment. The course examines the principles of sustainable development, energy-saving technologies, renewable energy sources, waste management strategies, and environmentally sound production processes	Automation, telemechanics, and transport communications	Automation, telemechanics, and transport communications
GED	EC 1	Fundamentals of scientific research	150	5	6	LO6	The discipline introduces the fundamentals of scientific activity, covering its goals, methods, and forms, and contributes to the formation of theoretical knowledge and practical skills necessary for successful scientific research in the chosen professional field. It also develops the ability to independently search for, analyze, and apply scientific information, which becomes an important foundation for further research and professional activities.	Applied Physics, Engineering Mathematics 1, Engineering Mathematics 2	Intelligent technologies in the transport hub, Innovative infrastructure of the passenger complex, Final certification
BD	EC 1	Organization of wagon traffic on the railway network	180	6	**4**	LO7	The discipline is devoted to the study of the theoretical foundations and practical methods of forming, distributing, and regulating wagon flows on the railway network. It examines the basic concepts and classification of wagon flows, including their structure, direction, capacity, stability, and the factors that influence their formation. The discipline also explores the principles of transportation routing, methods of developing optimal train formation plans that take into account economic and technological factors, as well as the capacity of stations and sections.	Transport and logistics systems, General transport course, Interaction of transport modes	Management of railway schools' operational work, Technology of the junction station and access roads
BD	EC1	Organization of passenger traffic on the railway network	180	6	4	LO10	The discipline covers the theoretical foundations and practical methods of forming, distributing, regulating, and forecasting passenger flows on the railway network. It provides knowledge and skills for optimizing the route network, improving the quality of passenger services, effectively planning transportation, and making rational use of rolling stock. The discipline examines the basic concepts and classification of passenger flows, their structure, direction, capacity, seasonality, and unevenness, as well as the factors that influence their formation.	Transport and logistics systems, General transport course, Interaction of transport modes	Organization and management of passenger transportation, ensuring passenger transport security on rail transport
BD	EC2	Technical Regulation and Traffic Safety in Railway Transport	180	6	4	LO11	The discipline is devoted to the study of the technical regulation system aimed at ensuring the safety of traffic and the operation of railway transport. The course examines the regulatory and technical documentation that establishes requirements for infrastructure facilities, rolling stock, and technological processes, as well as the mechanisms for monitoring and supervising compliance with these requirements.	Fundamentals of Law and Anti-Corruption Culture, Modern Technologies for Managing Railway Stations and Nodes	Technology of transport and transfer hubs, Innovative infrastructure of the passenger complex
BD	EC2	Ensuring passenger transport security on railways	180	6	4	LO10	The discipline covers methods of protecting passengers from acts of illegal interference and other threats on railway transport, including organizational and technical measures to prevent crimes and actions in emergency situations. Knowledge and skills are formed to ensure the transport security of passengers and their practical application	Regulatory and legal support for passenger transportation by rail, Organization of passenger traffic on the railway network, Organization and management of passenger transportation	Final certification

BD	EC3	Intelligent technologies in the operation of a transport hub	210	7	7	LO12	Development of a systematic understanding of the organization of interaction in transport hubs, study of the technology of intelligent management of the transport hub, familiarization with the theoretical and practical achievements in the organization of the transport hub, their connections in interactions in transport hubs, and readiness to use advanced technologies in the development of technological processes for the functioning of professional objects, based on the need to ensure rational modes of operation of transport enterprises and vehicles	Transport security and train traffic control systems, Intelligent passenger transportation management systems in rail transport, Applied artificial intelligence in transport systems	Final certification
BD	EC3	Технология работы транспортно-пересадочных узлов	210	7	7	LO12	The discipline is aimed at studying the principles of organization, functioning, and interaction of various modes of transport within a single transport and transfer hub (TPU). The course covers the theoretical foundations of TPU design and management, as well as practical aspects of ensuring efficient, safe, and comfortable passenger transfers. It examines the classification and typology of TPU, their functional zoning, and the requirements for the placement and integration of transport facilities within the TPU.	Ensuring passenger transport security on railways, Organizing passenger traffic on the railway network, Modern technologies for managing railway stations and hubs, Applied artificial intelligence in transport systems	Final certification
BD	EC4	Managerial economics	150	5	9	LO8	Formation of the conceptual apparatus and development of skills of economic analysis using modern models and regularities of economic science, consideration of economic problems and tasks facing the head of the firm. Studying this discipline will allow students to obtain and develop knowledge in the field of analytical studies of economic, technological and technical parameters of the enterprise, and will also allow to master the skills of applying special methods of economic substantiation of managerial decisions and assessment of their consequences.	Green Economy and Sustainable Entrepreneurship, Fundamentals of Financial Literacy	Final certification
BD	EC4	Time management	150	5	9	LO10	The discipline studies a system of methods, tools, and approaches aimed at effective time management in order to achieve the set goals. The course is designed to enhance the skills of organizing and optimizing work time, increasing productivity, reducing stress, planning, delegating, using tools and technologies, and understanding one's own time and energy rhythms in order to make the most of one's time.	Green Economy and Sustainable Entrepreneurship, Fundamentals of Financial Literacy	Intelligent technologies in the operation of transport hubs, Technology of transport and transfer hubs
BD	EC5	Applied artificial intelligence in transportation systems	90	3	6	LO5	The discipline is aimed at developing an understanding of modern approaches and technologies of artificial intelligence (AI) applied in the field of transport and logistics. The course covers the basic algorithms of machine learning, data mining and decision-making applied to optimize transport processes: flow management, demand forecasting, routing, maintenance, monitoring and security. Special attention is paid to the application of AI in the automation of transport systems, intelligent transport platforms, unmanned and autonomous means of transportation, as well as the digitalization of logistics chains.	Engineering Graphics and Computer Modeling, Python Programming Fundamentals	Transport security and train traffic control systems, Innovative passenger complex infrastructure

BD	EC5	Intelligent passenger transportation management systems on rail transport	90	3	6	LO5	The discipline is aimed at developing competencies in the design, implementation, and operation of intelligent control systems (ICS) for the organization of passenger transportation. It covers modern digital technologies used for managing passenger flows, automating route planning processes, dispatching, monitoring trains, and informing passengers. The discipline also focuses on the architecture and components of ICS, as well as their integration with other railway transport subsystems, including ticketing, navigation, logistics, and analytical modules.	Transport and logistics systems, Modern technologies for managing railway stations and hubs	Cargo and commercial operations on rail transport, and the technology of transport terminals
PD	EC1	Technology of the junction station and access roads	180	6	7	LO3	The discipline covers modern technologies and methods of organizing the work of various types of transport terminals. It addresses the issues of planning, organizing, and managing technological processes at terminals, as well as ensuring their safety and efficiency. The discipline fosters a comprehensive understanding of the principles of organizing and managing processes at terminals, as well as the practical application of modern methods and technologies to enhance their efficiency and safety.	Transport and logistics systems, Modern technologies for managing railway stations and hubs	Technology of transport terminals, Innovative infrastructure of passenger complexes, Organization of high-speed transport
PD	EC1	Passenger station operation technology	180	6	7	LO3	The principles of organization and management of technological processes that ensure high-quality and safe passenger transportation are studied. The classification of passenger stations, technologies for performing basic station operations, including the reception and departure of trains, shunting operations, maintenance, equipping passenger cars of various categories, and preparing trains for a voyage, are considered.	Transport and logistics systems, Modern technologies for managing railway stations and hubs	Final certification
PD	EC2	Technology of operation of transport terminals	150	5	7	LO11	The discipline covers modern technologies and methods of organizing the work of various types of transport terminals. It addresses the issues of planning, organizing, and managing technological processes at terminals, as well as ensuring their safety and efficiency. The discipline fosters a comprehensive understanding of the principles of organizing and managing processes at terminals, as well as the practical application of modern methods and technologies to enhance their efficiency and safety.	Technology of passenger stations, Technology of junction stations and access roads,	Final certification
PD	EC2	Innovative infrastructure of the passenger complex	150	5	7	LO10	Study of the theoretical foundations and practical aspects of the functioning of passenger infrastructure, which ensures the efficient movement of passengers and the management of relevant transport and information flows in passenger complexes of various scales and purposes; regulatory documents on the interaction of various modes of transport in a unified transport system. Acquisition of knowledge about current trends and innovations in the field of passenger complex infrastructure using smart technologies	Technology of passenger stations, Ensuring passenger transport security on rail transport, Fundamentals of scientific research	Automation of logistics processes (RFID, IoT, sensor networks), Minor program 3, Final certification
PD	EC3	Application of Smart City technology	150	5	9	LO8	The discipline aims to provide students with the theoretical knowledge and practical skills necessary for the design, implementation, and evaluation of smart urban infrastructure that focuses on sustainable development, improving the quality of life, and digital transformation of urban environments. The course covers the technological, organizational, and social aspects of the Smart City concept, including the digitalization of urban services, the management of urban mobility, sustainable resource consumption, and the interaction with citizens through digital platforms.	Engineering Graphics and Computer Modeling, Information and Communication Technologies	Automation of logistics processes (RFID, IoT, sensor networks), Minor program 3, Final certification

PD	EC3	Minor program 1:	150	5	9	LO10	The first of the three disciplines, which allows you to form additional professional competencies in various subject areas	Зеленая экономика и устойчивое предпринимательство, Основы финансовой грамотности	Технология работы транспортных терминалов, Минорная программа 3, Итоговая аттестация
PD	EC4	Automation of Logistics Processes (RFID, IoT, Sensor Networks)	90	3	7	LO3	Modern automation technologies in transport logistics are studied. Students learn to apply RFID tags, the Internet of Things (IoT), and sensor networks for monitoring and managing cargo flows. Special attention is given to increasing transparency, responsiveness, and efficiency of logistics operations through digital solutions and real-time data integration	Python Programming Fundamentals, Professionally Oriented Foreign Language, Digital Inclusion, and Smart City Technology Applications	Final certification
PD	EC4	Minor program 2:	90	3	7	LO3	The second of the three disciplines, which allows you to form additional professional competencies in various subject areas	Foreign language	Final certification
PD	EC5	Organization of high-speed traffic on transport	90	3	7	LO8	The discipline studies the principles of creating and operating high-speed highways, rolling stock and infrastructure, as well as the integration of high-speed traffic into the existing transport network. It examines global experience, technical requirements for high-speed lines and features of rolling stock, principles of traffic management, as well as successful projects and technologies used in different countries.	Technology of passenger stations, Modern technologies for managing railway stations and hubs	Final certification
PD	EC5	Minor program 3:	90	3	7	LO8	The third of the three disciplines, which allows you to form additional professional competencies in various subject areas	Digital inclusion, Smart City technology, and logistics process automation (RFID, IoT, and sensor networks)	Final certification

10. EXPERT OPINIONS

Expert Opinion

for the Educational Program 6B07186 - Transportation process management and railway operation, Field of Study 6B071 Engineering

Mode of Study: Full-time
Duration of Study: 3 years

To assess the quality and compliance of the educational program 6B07186 "Management of Transportation Processes and Operation of Railways" with modern requirements for the training of specialists in the field of railway transport, as well as its potential to ensure the competitiveness of graduates in the labor market.

The expertise was conducted based on an analysis of the submitted documentation (curriculum, work programs of disciplines, practice programs, information about the faculty), as well as taking into account the professional experience of the expert in the field of railway transport and higher education.

The program 6B07186 "Management of Transportation Processes and Operation of Railways" is undoubtedly relevant in the context of the development of the railway industry. Growing volumes of transportation, the need to improve efficiency and safety, and the introduction of new technologies require highly qualified specialists capable of solving complex problems in the field of management and operation of railway transport.

Analysis of the labor market confirms the demand for graduates of this program. Railway industry companies are experiencing a need for specialists with knowledge in the field of logistics, transportation process management, infrastructure operation, as well as skills in working with modern information systems.

The program's curriculum is balanced and includes disciplines from the mandatory and elective components, ensuring the formation of both general cultural and professional competencies in accordance with the requirements of the State Compulsory Standard of Education (GCSE).

The structure of the program is logical and consistent, which ensures the gradual acquisition of educational material and the formation of a holistic view of the functioning of railway transport.

The catalog of elective disciplines provides students with the opportunity to deepen their knowledge in areas of interest to them, which contributes to the formation of an individual educational trajectory.

Particular attention should be paid to the presence in the program of disciplines reflecting modern trends in the development of railway transport, such as: Intelligent Technologies in the Work of the Transport Hub; Management of Operational Work of Railway Sections; Applied Artificial Intelligence in Transport Systems; Innovative Infrastructure of the Passenger Complex.

The program provides for a significant amount of practical training for students in the form of academic and industrial practices.

The content of the practice programs is focused on the formation of professional skills and abilities among students that are necessary for successful work in the industry.

The presence in the program of practices aimed at mastering modern information systems and technologies used in the management and operation of railway transport is important.

Qualified teachers with academic degrees and work experience in the field of railway transport are involved in the implementation of the educational program.

The involvement of specialists-practitioners working in railway industry companies in teaching is important, as it allows ensuring the connection between theory and practice and updating educational material.

The educational program complies with the requirements of the State Compulsory Standard of Education (GCSE), the National Qualifications Framework, the Sectoral Qualifications Framework, and professional standards.

The educational program 6B07186 "Management of Transportation Processes and Operation of Railways" in the field of study 6B071 "Engineering and Engineering Affairs" is competitive and meets modern requirements for the training of specialists in the field of railway transport. The program has significant potential to ensure the demand for graduates in the labor market.

The Expert:
Chief Department of Dispatching Transportation Management
TransCom LLP Kosybaev K.

Review

of the Educational Program 6B07186 - Management of Transportation Processes and Operation of Railways, Field of Study 6B071 Engineering

The submitted undergraduate educational program 6B07186 "Management of Transportation Processes and Operation of Railways" in the field of study 6B071 "Engineering and Engineering Affairs" has been thoroughly analyzed for compliance with modern requirements for the training of specialists in the field of railway transport.

The program is fully geared towards preparing highly qualified specialists equipped with competencies sought after in today's labor market for the management and operation of railway transport. The content of the educational program reflects current industry development trends, including automation and digitalization, while focusing on enhancing the safety and efficiency of the transportation process overall.

The structure of the educational plan is logically sound, encompassing disciplines from both the mandatory and elective components, aimed at cultivating general cultural as well as professional competencies, in strict adherence to the State Compulsory Standard of Education. A clear and sequential logic in the study of disciplines is provided, which positively impacts the assimilation of learning material and the quality of specialist training.

The catalog of elective disciplines is particularly noteworthy, enabling students to create an individualized learning trajectory and delve deeper into areas that pique their interest. Importantly, the program includes disciplines that reflect contemporary trends in railway transport development, such as "Intelligent Technologies in the Work of the Transport Hub", "Management of Operational Work of Railway Sections", "Applied Artificial Intelligence in Transport Systems" and "Innovative Infrastructure of the Passenger Complex."

The educational program incorporates professional and practical training for students through various forms of practice. The content of the practice programs demonstrates a clear focus on developing essential practical skills and abilities in students, which are highly sought after in the actual professional environment. Special attention is given to developing students' skills in working with modern information systems and technologies that are actively used within the industry.

The content of the syllabi for academic disciplines and practices allows for the well-founded conclusion that the educational program aligns with the competency model of the graduate, enabling them to effectively solve tasks related to the management and organization of the transportation process, the operation of railway infrastructure, and the assurance of traffic safety.

Experienced faculty members with relevant qualifications and practical work experience in the industry, as well as representatives from employers, are involved in the development and implementation of the educational program. This guarantees that the needs of the labor market and current trends in the development of railway transport are fully considered.

The educational program fully meets the requirements of the GCSE, the National Qualifications Framework, the Sectoral Qualifications Framework, as well as professional standards and the atlas of new professions.

The educational program 6B07186 "Management of Transportation Processes and Operation of Railways," with the field of study 6B071 "Engineering and Engineering Affairs," fully complies with the established requirements and can be recommended for implementation. The program is aimed at equipping graduates with the necessary general cultural and professional competencies, ensuring their successful professional activity in the field of railway transport.

Reviewer:
Research Center
for the Development of the Transportation Process
Director for Commercialization

Научно-исследовательский центр "Развития перевозочного процесса" г. Алматы

A. Smanov

11. REVIEWER'S CONCLUSION

Review

of the Educational Program 6B07186 - Management of Transportation Processes and Operation of Railways, Field of Study 6B071 Engineering

The submitted undergraduate educational program 6B07186 "Management of Transportation Processes and Operation of Railways" in the field of study 6B071 "Engineering and Engineering Affairs" has been thoroughly analyzed for compliance with modern requirements for the training of specialists in the field of railway transport.

The program is fully geared towards preparing highly qualified specialists equipped with competencies sought after in today's labor market for the management and operation of railway transport. The content of the educational program reflects current industry development trends, including automation and digitalization, while focusing on enhancing the safety and efficiency of the transportation process overall.

The structure of the educational plan is logically sound, encompassing disciplines from both the mandatory and elective components, aimed at cultivating general cultural as well as professional competencies, in strict adherence to the State Compulsory Standard of Education. A clear and sequential logic in the study of disciplines is provided, which positively impacts the assimilation of learning material and the quality of specialist training.

The catalog of elective disciplines is particularly noteworthy, enabling students to create an individualized learning trajectory and delve deeper into areas that pique their interest. Importantly, the program includes disciplines that reflect contemporary trends in railway transport development, such as "Intelligent Technologies in the Work of the Transport Hub", "Management of Operational Work of Railway Sections", "Applied Artificial Intelligence in Transport Systems" and "Innovative Infrastructure of the Passenger Complex."

The educational program incorporates professional and practical training for students through various forms of practice. The content of the practice programs demonstrates a clear focus on developing essential practical skills and abilities in students, which are highly sought after in the actual professional environment. Special attention is given to developing students' skills in working with modern information systems and technologies that are actively used within the industry.

The content of the syllabi for academic disciplines and practices allows for the well-founded conclusion that the educational program aligns with the competency model of the graduate, enabling them to effectively solve tasks related to the management and organization of the transportation process, the operation of railway infrastructure, and the assurance of traffic safety.

Experienced faculty members with relevant qualifications and practical work experience in the industry, as well as representatives from employers, are involved in the development and implementation of the educational program. This guarantees that the needs of the labor market and current trends in the development of railway transport are fully considered.

The educational program fully meets the requirements of the GCSE, the National Qualifications Framework, the Sectoral Qualifications Framework, as well as professional standards and the atlas of new professions.

The educational program 6B07186 "Management of Transportation Processes and Operation of Railways," with the field of study 6B071 "Engineering and Engineering Affairs," fully complies with the established requirements and can be recommended for implementation. The program is aimed at equipping graduates with the necessary general cultural and professional competencies, ensuring their successful professional activity in the field of railway transport.

Reviewer:
«Eurasia-Trans» Research Center
Project Director **K. Sharipov**

Review
for the educational program
6B07186 - Transportation process management and railway operation,
field of study 6B071 Engineering

The submitted undergraduate educational program 6B07186 "Management of Transportation Processes and Operation of Railways" in the field of study 6B071 "Engineering and Engineering Affairs" has been analyzed in terms of compliance with modern requirements for the training of specialists in the field of railway transport.

The program is focused on training specialists in demand in the labor market in the field of management and operation of railway transport. The content of the program reflects current trends in the development of the industry, including automation, digitalization, and increasing the safety and efficiency of the transportation process.

The curriculum includes disciplines of the mandatory component and the component of choice, ensuring the formation of general cultural and professional competencies provided for by the State Compulsory Standard of Education. The program is clearly structured, providing a logical sequence of studying disciplines, which contributes to the high-quality assimilation of the material. The catalog of elective disciplines allows students to form an individual educational trajectory, studying in depth the areas of interest to them. Particular attention should be paid to the presence of disciplines reflecting modern trends in the development of railway transport, such as: "Intelligent technologies in the operation of a transport hub," "Management of operational work of railway sections", "Applied artificial intelligence in transportation systems", "Innovative infrastructure of the passenger complex".

The program provides for professional and practical training of students in the form of practical training. The content of the practice programs indicates their ability to form the necessary practical skills and abilities among students. Attention is paid to the formation of students' skills in working with modern information systems and technologies used in the industry.

The content of the work programs of academic disciplines and practices allows us to conclude that the competency model of a graduate is consistent, enabling them to solve problems in the management and organization of the transportation process, operation of railway infrastructure, and ensuring traffic safety.

Experienced teachers and representatives of employers are involved in the development of the educational program, which ensures that the requirements of the labor market and modern trends in the development of the industry are taken into account.

The educational program as a whole meets the basic requirements of the GCSE, the national qualifications framework, the sectoral qualifications framework, professional standards, and the atlas of new professions.

The educational program 6B07186 "Management of Transportation Processes and Operation of Railways" in the field of study 6B071 "Engineering and Engineering Affairs" can be recommended for implementation. The program ensures the formation of the necessary general cultural and professional competencies for the successful work of graduates in the field of railway transport.

Reviewer:
TransCom LLP
Director of the Department
For Transportation activities

Zhumataev A.

12. LETTERS OF RECOMMENDATION

EURAZIA-TRANS
ҒЫЛЫМИ ОРТАЛЫҒЫ

НАУЧНЫЙ ЦЕНТР
EURAZIA-TRANS

Президенту-Ректору
ALT University им. М.Тынышпаева
Жармагамбетовой М.С.

Уважаемая Меруерт Советовна!

Руководство научного центра «Eurasia-Trans» в лице директора по проектам К. Шарипова ознакомилось с содержанием образовательной программы бакалавриата 6B07186 "Управление процессами перевозок и эксплуатация железных дорог" по направлению подготовки 6B071 "Инженерия и инженерное дело" тщательно проанализирована на предмет соответствия современным требованиям, предъявляемым к подготовке специалистов в сфере железнодорожного транспорта.

Программа полностью ориентирована на подготовку квалифицированных специалистов, обладающих компетенциями, востребованными на современном рынке труда в области управления и эксплуатации железнодорожного транспорта. Содержание образовательной программы отражает актуальные тенденции развития отрасли, включая процессы автоматизации и цифровизации, а также направлено на повышение безопасности и эффективности перевозочного процесса в целом.

Структура учебного плана образовательной программы логически обоснована и включает в себя дисциплины обязательного и элективного компонентов, направленные на формирование как общекультурных, так и профессиональных компетенций, в строгом соответствии с государственным общеобязательным стандартом образования (ГОСО). Предусмотрена четкая и последовательная логика изучения дисциплин, что положительно сказывается на усвоении учебного материала и качестве подготовки специалистов. Особого внимания заслуживает каталог элективных дисциплин, позволяющий студентам сформировать индивидуальную траекторию обучения и углубленно изучать наиболее интересные для них области. Важным является включение дисциплин, отражающих современные тенденции развития железнодорожного транспорта, такие как: "Интеллектуальные технологии в работе транспортного узла", "Управление эксплуатационной работой железнодорожных участков", "Прикладной искусственный интеллект в транспортных системах", а также "Инновационная инфраструктура пассажирского комплекса".

Образовательная программа в полной мере отвечает требованиям ГОСО, Национальной рамке квалификаций, Отраслевой рамке квалификаций, а также профессиональным стандартам и атласу новых профессий.

Образовательная программа 6B07186 "Управление процессами перевозок и эксплуатация железных дорог" по направлению подготовки 6B071 "Инженерия и инженерное дело" в полной мере соответствует установленным требованиям и может быть рекомендована к реализации. Программа направлена на формирование у выпускников необходимых общекультурных и профессиональных компетенций, обеспечивающих их успешную профессиональную деятельность в сфере железнодорожного транспорта.

Директор по проектам **Шарипов К.**

Қаскелең қаласы, Көшек батыр көш., 62

13. PROTOCOLS OF REVIEW AND APPROVAL

АО «ALT Университет имени Мухамеджана Тынышпаева»

ПРОТОКОЛ № 1

Заседания
Академического комитета по образовательной программе «Управление процессами перевозок и эксплуатация железных дорог» кафедры транспортных услуг и бизнеса

г. Алматы «02» мая 2025 года

Председатель: Бекмагамбетова Л.К.
Секретарь: Суйенишова М.Е.

Присутствовали:
Представители академического комитета: PhD, ассистент-профессор кафедры «ТУиБ», руководитель ОП Бекмагамбетова Л.К., к.т.н., ассоциированный профессор кафедры «ТУиБ» Битилеуова З.К., к.т.н., ассоциированный профессор кафедры «ТУиБ» Вахитова Л.В., ассистент-профессор кафедры «ТУиБ», к.т.н. Абибуллаев С.Ш., к.т.н., специалист-аналитик отдела диспетчерского управления перевозками ТОО «ТрансКом» Айкумбеков М.Н.
Представители кафедры «ТУиБ»: Заведующий кафедры, к.т.н., ассоциированный профессор Мусалиева Р.Д., д.т.н., ассистент-профессор Мусабаев Б.К., к.т.н., ассистент-профессор Молгаждаров А.С., к.т.н., сениор-лектор Нуржаубаев М.М., сениор-лектор Олжабаева Р.С., ассистент-преподаватель Суйенишова М.Е.
Представители работодателей и академического сообщества (онлайн): Директор по коммерциализации ТОО НИЦ «Развитие перевозочного процесса» Сман А., начальник Отдела диспетчерского управления перевозками ТОО «ТрансКом» Косыбаев К.К., директор по пректам научного центра «Eurasia-Trans» Шарипов К., директор Департамента по перевозочной деятельности ТОО «ТрансКом» Жуматаев А.Ж.
Обучающиеся: обучающийся по ОП 6В11326-ОПДЭТ Мұрат Бекасыл.

ПОВЕСТКА ДНЯ:

1. О разработке и внесении в Реестр образовательных программ РК новой образовательной программы 6В07186 - Управление процессами перевозок и эксплуатация железных дорог. Рассмотрение компетентностной модели выпускника
2. О разработке рабочего учебного плана и каталога элективных дисциплины новой образовательной программы 6В07186 - Управление процессами перевозок и эксплуатация железных дорог.

По первому вопросу

ВЫСТУПИЛА:
PhD, ассистент-профессор кафедры транспортных услуг и бизнеса, руководитель ОП 6В07186 – «Управление процессами перевозок и эксплуатация железных дорог» Бекмагамбетова Л.К., которая предложила членам академического комитета обсудить новую образовательную программу ОП 6В07186 – «Управление процессами перевозок и эксплуатация железных дорог», рассмотреть компетентностную модель выпускника ОП, траекторию обучения, РУП, КВК и КЭД. Представила на рассмотрение членам академического комитета проект образовательной программы 6В07186 - Управление процессами перевозок и эксплуатация железных дорог.
Компетентностная модель выпускника включает в себя следующие части:
- Цель и задачи образовательной программы;
- Результаты обучения;

- Область, объекты, виды и функции профессиональной деятельности;
- Перечень должностей по образовательной программе;
- Профессиональные сертификаты, полученные по окончании обучения;
- Требования к предшествующему уровню образования.

ВЫСТУПИЛ:

Д.т.н., ассистент-профессор кафедры транспортных услуг и бизнеса Мусабаев Б.К., который предложил в рамках новой ОП «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» включить в каталог вузовского компонента (КВК) внести общетранспортные дисциплины, а в каталог компонента по выбору (КЭД) – профильные дисциплины.

ВЫСТУПИЛ:

К.т.н., ассистент-профессор кафедры транспортных услуг и бизнеса Молгаждаров А.С., который отметил, что при разработке компетентностной модели, РУП требуется проанализировать и учесть новые профессиональные стандарты, а также Атлас новых профессий РК.

ВЫСТУПИЛ:

К.т.н., специалист-аналитик отдела диспетчерского управления перевозками ТОО «ТрансКом» Айкумбеков М.Н., который поддержал предложения Мусабаева Б.К., Молгаждарова А.С. и также предложил при разработке РУП максимально возможно выделить академические часы на производственную практику, при разработке рабочих учебных программ дисциплины учесть проведение выездных занятий на производстве и проведение гостевых лекций ведущими специалистами транспортно-логистической отрасли.

ВЫСТУПИЛА:

PhD, ассистент-профессор кафедры транспортных услуг и бизнеса, руководитель ОП «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» Бекмагамбетова Л.К., которая отметила, что необходимо назначить экспетов и рецензентов ОП, а также поступило рекомендательное письмо от директора по проектам научного центра «Eurasia-Trans» в лице директора Шарипова К., которые проанализировали проект ОП и дали предложения включить в программу дисциплины, направленные на формирование навыков компьютерного и инженерного моделирования, что позволит будущим специалистам использовать современные инструменты для анализа и оптимизации транспортных процессов, а также учесть в учебном плане дисциплины, развивающие навыки распределения и управления финансами, развивающие способности к принятию рациональных технико-экономических и финансовых решений.

Также предложила в качестве экспертов и рецензентов определить следующие кандидатуры:

Эксперты:

- Сман А. - Директор по коммерциализации ТОО НИЦ «Развитие перевозочного процесса»;
- Косыбаев К.К. – Начальник Отдела диспетчерского управления перевозками ТОО «ТрансКом».

Рецензенты:

- Шарипов К. – директор по пректам научного центра «Eurasia-Trans»;
- Жуматаев А.Ж. – директор Департамента по перевозочной деятельности ТОО «ТрансКом».

Внесено предложение. Утвердить образовательную программу «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» (компетентностную модель, УП, описание дисциплин) с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.

ПОСТАНОВИЛИ:

1. Утвердить предложенную образовательную программу «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» (компетентностную модель, УП, описание дисциплин) с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.
2. Назначить в качестве экспертов и рецензентов определить следующие кандидатуры:

Эксперты:

- Сман А. - Директор по коммерциализации ТОО НИЦ «Развитие перевозочного процесса»;

- Косыбаев К.К. – Начальник Отдела диспетчерского управления перевозками ТОО «ТрансКом».

Рецензенты:

- Шарипов К. – директор по пректам научного центра «Eurasia-Trans»;
- Жуматаев А.Ж. – директор Департамента по перевозочной деятельности ТОО «ТрансКом».

3. Представить проект обновления образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» на рассмотрение КОК УМБ института логистики и бизнеса.

4. Обеспечить внесение в Реестр образовательных программ РК (ЕПВО) обновление образовательной программы «6В07186 - Управление процессами перевозок и эксплуатация железных дорог».

По второму вопросу

ВЫСТУПИЛА:

PhD, ассистент-профессор кафедры транспортных услуг и бизнеса, руководитель ОП «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» Бекмагамбетова Л.К., которая представила на рассмотрение проект рабочего учебного плана и каталога элективных дисциплины новой образовательной программы «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» и предложила утвердить с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.

ВЫСТУПИЛ:

К.т.н., специалист-аналитик отдела диспетчерского управления перевозками ТОО «ТрансКом» Айкумбеков М.Н., который поддержал предложение об утверждении рабочего учебного плана и каталога элективных дисциплины новой образовательной программы «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.

Внесено предложение. Утвердить рабочий учебный план и каталог элективных дисциплины новой образовательной программы «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.

ПОСТАНОВИЛИ:

1. Утвердить рабочий учебный план и каталог элективных дисциплины новой образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» с учетом внесенных предложений и рекомендаций со стороны членов академического комитета, представителей кафедры и представителей сообщества работодателей.

2. Представить рабочий учебный план и каталог элективных дисциплины новой образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» на рассмотрение КОК УМБ института логистики и бизнеса.

Председатель **Бекмагамбетова Л.К.**

Секретарь **Суйеншова М.Е.**

АО «ALT Университет имени Мухамеджана Тынышпаева»

ПРОТОКОЛ № 9

Выписка из протокола № 9
заседания КОК УМБ института логистики и бизнеса

г. Алматы «05» мая 2025 года

Председатель: Мусаева Г.С.
Секретарь: Урсарова А.К.
Присутствовали: Мусаева Г.С. – председатель, директор института «ЛиБ» ассистент-профессор АЛТ; Бадамбаева С.Е – зам. председателя, зам. директора института «ЛиБ»., Елешева Ж.Б. - секретарь, ассистент-преподаватель кафедры «ТУиБ», зав. кафедрой «ТУиБ», ассоц. профессор Битилеуова З.К., зав.кафедрой «ТУиБ», ассоц. профессор Мусалиева Р.Д., ассистент-профессор «ТУиБ», ассистент-профессор Абибуллаев С.Ш., ассистент-профессор кафедры «ТУиБ» Сугурова А.Ж., ассоц. профессор кафедры «ТУиБ» Вахитова Л.В., ассоц. профессор кафедры «ТУиБ» Мусабаев Б.К., ассоц. профессор АЛТ кафедры «ТУиБ» Молгаждаров А.С.; сениор-лектор кафедры «ТУиБ» Урсарова А.К., сениор-лектор кафедры «ТУиБ» Нуржаубаев М.М., сениор-лектор «ТУиБ» Оджабаева Р.С.
Представители с производства: Директор по коммерциализации ТОО НИЦ «Развитие перевозочного процесса» Сман А., начальник Отдела диспетчерского управления перевозками ТОО «ТрансКом» Косыбаев К.К., директор по пректам научного центра «Eurasia-Trans» Шарипов К., директор Департамента по перевозочной деятельности ТОО «ТрансКом» Жуматаев А.Ж.
Обучающиеся: обучающийся по ОП 6В11326-ОПДЭТ Мұрат Бекасыл.

ПОВЕСТКА ДНЯ:

1. Рассмотрение новой образовательной программы «6В07186 - Управление процессами перевозок и эксплуатация железных дорог».
2. Рассмотрение Каталога элективных дисциплин (КЭД), Рабочей учебной программы (РУП), паспорта новой образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог».

ВЫСТУПИЛ(а): зав. кафедрой «ТУиБ» Мусалиева Р.Д. представил на рассмотрение новую образовательную программу бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог» КЭД, РУП.

На кафедре «ТУиБ» было проведено заседание академического комитета с привлечением представителей работодателей, академического сообщества и обучающихся по обсуждению структуры и содержанию новой образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог». Представителями работодателей и обучающимися были предложены ряд новых актуальных дисциплин, которые кафедра одобрила и включила в новые КЭД и РУП.

ПОСТАНОВИЛИ:
1. Информацию принять к сведению;
2. Учесть все предложения и рекомендации работодателей, представителей студенческого актива;
3. Представить проект новой образовательной программы бакалавриата «6В07186 - Управление процессами перевозок и эксплуатация железных дорог», КЭД, РУП для рассмотрения и утверждения на Совете института, УС ALT Университета.

Председатель КОК УМБ **Мусаева Г.С.**

Секретарь **Урсарова А.К.**

14. APPROVAL SHEET

№	Full name	Place of work/study	Position	Date of approval	Signature
1	Musayeva G.S.	ALT university	director	02.05.25	
2	Toigozhinova A	E and DTV	director	02.05.25	
3	Saleyeva N.	IT and C	director	02.05.25	
4	Абдулаев Ш. А.	ALT	директор ИТиС	02.05.25	
5	Akhmetova P.I.	ALT University	Head of department	02.05.25	
6	Abdiraiymova A	ALT University	Head of department	02.05.25	
7.	Musataeva R.D.	ALT, Tourism and Business	Head depart.	02.05.25	
8	Кулменов К.С	ALT, каф. АЕС	Head of depat.	02.05.25	
9	Капиталова Р.С	ALT каф. ТС	Зав. каф.	02.05.25	
10.	Камабаева Г.У.	ALT, LE	и.о. зав. каф.	02.05.25	
11	Karymsakova N	ALT, AC	Head of dep.		
12	Kussymova D.	ICT, ALT	Head of dep.	02.05.25	

15. CHANGE REGISTRATION FORM

Publication number	Date of introduction	Changes	Signature
1	2	3	4