

AGREEMENT

ТОО «Алматы-Електротранс»

Deputy General Director

Omarshan A. E.

2023 year.



8. CATALOG OF UNIVERSITY COMPONENT DISCIPLINES

EDUCATIONAL PROGRAM

6B11367-Traffic management

Level of education: Bachelor

's degree Duration of study: 4 years

Year of admission: 2023

Cycle	Component	Name of the discipline	Total labor		intensity Semester	Learning outcomes	Brief description	of the discipline	Prerequisites
			Post requirements in academic hours	in academic credits					
1	2	3	4	5	6	7	8	9	10
DB	VK	Engineering mathematics	270	9	1	PO1	Mastering the mathematical apparatus for solving theoretical and applied problems of a specific profile, getting an idea of mathematical modeling and interpretation of the obtained solutions. Questions of linear algebra, analytic geometry, mathematical analysis, differential equations, and series theory are considered. Within the framework of the discipline, calculation and graphic work is performed. Active learning methods – teamwork, brainstorming.	Subjects of the school component	Fundamentals of computer modeling, information and communication technologies, Design and operation Road design and operation of highways
DB	VC	Organization and management of passenger transportation	270	9	4	PO11	Study of the principles of organization and management of passenger transportation by various modes of transport in suburban, regional and international communications, the basic concepts of intermodal passenger transportation. Mastering the skills of planning and managing passenger transportation on various modes of transport, developing vehicle traffic schedules and schedules for coordinating the schedules of various modes of transport when they interact. As part of the discipline, you can demonstrate videos, work in small groups, and calculate practical tasks.	Transport management, Interaction of modes of transport	Technology and operation management of stations and junctions, Technology and operation management of railway sections and directions, Passenger transport complex, Production practice 1
DB	VK	Labor protection	180	6	5	RO6	The discipline examines the main dangerous and harmful production factors affecting transport workers during operation and repair of rolling stock, advanced methods and technical solutions to increase occupational injuries, improve working conditions and organize workplace safety, organize and manage the work of the company. labor protection, fire and electrical safety, the main event in the organization of workplaces.	General course of transport, Ecology and life safety and	Ensuring traffic safety in transport, Organization and management of a motor transport enterprise
DB	VK	Interaction of modes of transport	180	6	4	PO1	Acquisition of knowledge in the field of interaction of various modes of transport, quantitative estimates for choosing optimal solutions in management	Transportation management in transport	Organization and management of passenger transportation. Transport support for

							activities in railway transport. Formation of skills in organizing rational interaction between public and non-public transport, organizations and enterprises. Within the framework of the discipline, group work on tasks and solving practical problems are used.		international transportation, Technology and management of stations and hubs, Organization of cargo and commercial work, Transport and cargo systems
DB	VC	Fundamentals of computer modeling	180	6	3	RO8	Study of the purpose of technical and software tools, stages and methods of mathematical and computer modeling, requirements for mathematical support of the modeling process. Application of modern computer technology and automated systems for modeling transport processes, developing models of objects for various purposes, programming languages Python, Java, etc. Classes are conducted using computer technologies.	Engineering mathematics	Transport support of international transportations, Methods of scientific research, Final certification
of the data base	VC	Traffic safety in transport	180	6	7	179	The purpose of the discipline-a set of theoretical knowledge and practical skills in the field of traffic safety in transport-study of methods of regulatory regulation in the field of traffic safety control; organization of traffic safety services; Registration of traffic safety industrial enterprises in connection with violation of traffic safety regulations; analysis of accidents and official investigation of accidents that require close attention of state regulation and control in the field of transport.	Technical means of automated control systems, Device and operation of motor vehicles, Basic driver training	Motor Transport Security Service Vehicle safety service, Organization Road Traffic
Management Data base	VC	Transport management	270	9	2	PO11	Discipline meets to study issues related to transportation and management in road transport; individual transportation, traffic and operation of industrial transport; traffic selection; additional transportation and traffic management in road transport; risk of transportation and traffic management in air transport; specific transportation and traffic management in water transport.	General course of transport, Geography of transport	Technology and organization of road transport, Transport and cargo transport
DB	VK	Technical means ODD	270	9	5	PO10	The discipline forms an integral system of application in technical means of road traffic management consideration of consideration, design, inclusion of the area of operation of technical means of road traffic management, application of materials, operation features, calculations of operating modes, as well as studying the current regulatory and technical documentation applied to the operation of equipment means of traffic	management General course of transport, Geography of transport	Ensuring traffic safety in transport, Traffic
management DB	VK	Training practice	60	2	4	RO1-RO12 The	organization of training practice is aimed at providing bachelor's students with the main directions, objects, areas of professional activity and training profiles and consolidation of theoretical material.	General course of transport, Geography of transport	Production practice, , Technical means of road safety, IA
PD	VK	Road conditions and traffic safety	270	9	6	PO9, PO10	The purpose of the discipline is to form a holistic knowledge and practical skills in the field of traffic safety on highways and to draw up measures to improve road conditions in the design and operation of highways by studying the road network and safety problems, the impact of traffic modes and individual elements roads for the risk of road accidents.	Fundamentals of design, Construction of highways/ Design of transport objects	Traffic management systems, Final certification
pd	of the Traffic Management Code	Organization of road traffic	180	6	7	RO10, RO11	Discipline reveals the role, state and perspective of road traffic development in modern conditions, taking into account the importance of high efficiency of the transportation process when inspecting road safety and its environmental friendliness; introduces you to the regulatory framework of-legal and technical documents in the field of traffic management, development and efficiency of efficiency	Motor Transport Safety Service, Technical means	of Road Traffic Management Systems, IA
PD	VK	Local Police Service	180	6	7	RO9	Study of the activities of law enforcement agencies on the requirements of road safety, on-site administrative police service in public Administration, main units of the Patrol Department of the Ministry of Internal Affairs of the Republic of Kazakhstan, the Ministry of Internal Affairs of the Russian	Technical means of traffic management, Road construction, Basic training of	of the Traffic management system. Traffic management. Examination of road traffic accidents
							Ministry of Internal Affairs of the Russian Federation, the Ministry of		

							Internal Affairs of the Russian Federation, the Ministry of Internal Affairs of the Russian Federation.- post service; professional ethics; features of traffic patterns. About the activities of specialized public service centers: rules for providing services to citizens for obtaining a driver's license, registering vehicles, issuing license plates.		
PD	VC	Traffic management systems	270	9	8	RO10, RO11	Study of a set of software and hardware tools, systems and measures aimed at ensuring road traffic safety, reducing heavy delays, improving the parameters of the road network and improving the environmental situation. Providing traffic management of vehicles and pedestrian flows in the street and road network of cities or highways. Control of traffic light alarms via a remote control panel if surgical intervention is required. Dispatcher control of traffic light alarms.	Technical means of traffic management, Traffic management, Motor transport Safety Service	IA
PD	VK	Transport planning of cities	270	9	6	RO8	The task of the disciplines is a broad holistic system of knowledge and understanding of the basics of planning and development of specific areas of study of the main standards for designing the street and road network, techniques and methods for determining traffic in urban traffic; defining parameters of a network of streets, roads and pedestrian traffic, premises and premises for storing and servicing vehicles.	Traffic modeling, General Transport Course, Urban transport operation	Organization of road traffic, Traffic management systems
PD	VC	Motor Transport Safety Service	180	6	7	RO9, RO10	Study of theoretical and methodological foundations of safety and organization of motor transport in modern conditions. Exclusion of traffic safety activities. Regulatory legal acts regulating the activity of the database service, issues of interaction of the database service with the participation of traffic and the traffic police. Equipping and equipping the security cabinet, planning its operation. Development of measures to improve road safety.	Ensuring traffic safety in transport, Urban transport	operation Traffic management, Traffic management systems
PD	VK	Production practice 1	90	3	6	RO1, RO2, RO3, RO4, RO5, RO6, RO7, RO8, RO9, RO10 The	main tasks of production practice are: consolidation of theoretical knowledge and practical skills in the chosen educational program in production conditions, gaining experience in organizational work, obtaining a working specialty, developing practical skills and competencies in the process of mastering the bachelor's program. It is carried out in the bases of practices at enterprises in accordance with this educational program.	Transportation management in transport, Organization and management of passenger transportation, Technology and management of stations and junctions, Training practice	Production practice 2, Transport safety and train traffic management systems, Final certification
of PD	VK	Production practice 2	120	4	9	RO1, RO2, RO3, RO4, RO5, RO6, RO7, RO8, RO9, PO10	The purpose of bachelor's practice is to ensure the relationship between the theoretical knowledge obtained during 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 course of training, collect information for writing the final qualification work, study best practices at the enterprise, as well as gain experience in independent research work, master various methods of scientific work. It is carried out in the bases of practices at enterprises in accordance with this educational program.	Production practice 1, Transport Safety and Train traffic management Systems	Final Certification