

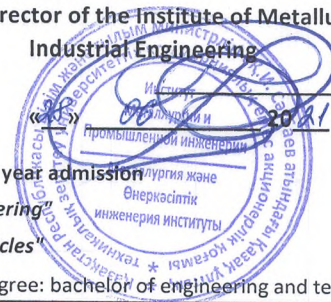
MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN  
Kazakh National Technical University named after K.I. Satpayev



APPROVED

Director of the Institute of Metallurgy and Industrial Engineering

K.B. Rysbekov



MAJOR ELECTIVE DISCIPLINES for 2021-2022 academic year admission

Educational program 6B07108 - "Transport Engineering"

Group of Educational programs B065 - "Motor vehicles"

Full-time study

Study duration : 4 years

Academic degree: bachelor of engineering and technology

Year of study	Code of electives in the curriculum	Code of discipline	Name of discipline	Cycle	Credits	lec/lab/pr	pre-requisites
6 th semester (SPRING 2024)							
3	3221	TRA197	Computer design systems for transport engineering	B	5	1/1/1	no
		TRA458	Device sensors and actuators electromechanical and electronic systems of vehicles				
	3222	TRA502	Hydraulic drives of lifting and transport and road construction machines	B	5	2/0/1	TRA470
		TRA503	Fundamentals of calculation of hydraulic and pneumatic systems of automotive equipment				
<b>Total:</b>					<b>10</b>		
7 th semester (AUTUMN 2024)							
4	4305	TRA509	Theory of lifting-transport, constructive and road machines	S	5	2/0/1	TRA470
		TRA510	Theory of vehicle movement				
		MCH133	Theory of vehicle operating properties				
	4306	TRA515	Design features of lifting and transport and road construction machines	S	5	2/0/1	TRA451, TRA469, TRA472
		TRA516	Design of automobile				
		TRA517	Design of motor transports				
	4307	TRA518	Technologies for the use of polymer composite materials in the production and repair of ground transport and technological machines	S	5	2/0/1	TRA473
		TRA480	Modernization of existing models of ground transport and technological machines				TRA470
	4308	TRA519	Repair of lifting and transport and road construction machines	S	5	2/0/1	TRA471
		TRA520	Repair and disposal of ground transport and technological machines				
	4309	TRA507	Electrical equipment of LTCRM	S	5	2/0/1	TRA470
		TRA508	Electrical equipment of motor transport				
<b>Total:</b>					<b>25</b>		
8 th semester (SPRING 2025)							
4310	TRA521	Design of industrial enterprises	S	5	2/0/1	TRA472	
	TRA522	Design of enterprises of motor transport production					
	TRA401	Technological design of enterprises of transport equipment					
4311	TRA524	Dynamics of transport equipment	S	5	2/0/1	MCH132	
	MCH106	Dynamic and strength calculations of transport equipment				MCH131	
	MCH116	Basics of the dynamics of machine mechanisms				MCH133	
<b>Total:</b>					<b>10</b>		

Credits numbers of elective disciplines over the entire period of study	
Cycle of disciplines	credits
Cycle of general disciplines (G)	0
Cycle of basic disciplines (B)	10
Cycle of special disciplines (S)	35
<b>Total:</b>	<b>45</b>

The decision of the Academic Council of the Kazakh National Technical University named after K.I. Satpayev. Protocol No 3 of the "25" 06 2021

Decision of the Academic and Methodological Council of the Kazakh National Technical University named after K.I. Satpayev. Protocol No 6 of the "4" 06 2021

The decision of the Academic Council of the Institute of Metallurgy and Industrial Engineering. Protocol No 14 of the "04" 06 2021

Head of Department of technological machines, transport and logistics  
Representative of Specialty council

K.K. Yelemessov  
M.K. Azimbekov