

AGREED
 Leading Researcher
 «KazRoadRI» JSC
 Adarbekov E.K.
 « 30 » 03 2023 г.



«Логистика және келік академиясы» АҚ
 I APPROVE
 Director of the «FE» Institute
 Chigambayev T.O.
 « 30 » 03 2023 г.
 Институт «Транспортная инженерия»



THE CATALOG OF DISCIPLINES OF THE COMPONENT OF CHOICE

EDUCATIONAL PROGRAMS

8D07165 – Transport facilities

Education level: Doctoral degree

Duration of study: 3 years

Year of admission: 2023

Module	Cycle	Component	Name of the discipline	Total labor intensity		Term	Learning outcomes	A brief description of the discipline	Prerequisites	Post-requirements	Department
				in academic hours	in academic credits						
1	2	3	4	5	6	7	8	9	10	11	12
Module 1 – Scientific and pedagogical competencies	BD	CC 1	Diagnostics and evaluation of the technical condition of artificial structures	150	5	1	LO3, LO5	The discipline dedicated to the study of the methods of examination, diagnosis and assessment of technical condition, methods of reconstruction and calculation methods of strengthening of load-bearing elements of structures, to develop students' ability to use the acquired knowledge and skills in solving scientific and technical problems in the operation and reconstruction of man-made structures.	Bachelor's and Master's degree courses	SRWDS, FC, Research practice	SI
			Inspection and testing of transport facilities				The discipline studies the principles and methods of inspection of structures, their diagnostics and assessment of their load-bearing capacity, reliability and quality of building structures and structures during their testing, methods of non-destructive testing to determine the main physical and mechanical characteristics of metal, reinforced concrete, wood and plastics in building structures and products, devices and equipment for inspection and testing, methods of restoring the load-bearing capacity and operational suitability of structures.				

1	2	3	4	5	6	7	8	9	10	11	12
Module 2 - Core competencies	PD	CC 4	Investigation of the stress-strain state of transport structures	150	5	1	L04, L05	The discipline studies the parameters that determine the stress-strain state of rod systems, plates, the main methods for calculating combined (rod and plate) elastic systems for dynamic loads, for stability, methods for assessing the reliability of building structures, foundations and complex systems (concepts and definitions of failures, limit states, factors that determine reliability, the influence of the time factor), the basic principles of calculating continuum systems using finite element models.	Bachelor's and Master's degree courses	SRWDS, FC, Research practice	SI
			Development of new structures and structural elements of transport structures				L04, L05	The discipline studies regulatory and technical documents, classification, regulatory framework in the field of transport structures, theoretical foundations for the design of transport systems, technology for the device of transport structures, the main factors for increasing the efficiency of activities in the field of production, the development of project documentation, technical inspection, monitoring, as well as data from modern literature sources in the transport sector, the main legislative acts, terms and basic concepts that regulate the industry.			
Итого				300	10						

Head of the Department of "Construction Engineering"



Ismagulova S.O.