

**JSC "ALT UNIVERSITY NAMED AFTER
MUKHAMEDZHAN TYNYSHPAEV"**

Department of "Construction Engineering"

APPROVE
Chairman of the ALT AC
S. Amirgalieva
Decision of the Academic Council of ALT
2024 year (protocol № 9)



**Questions for citizens of the Republic of Kazakhstan entering
for doctoral studies in groups of educational programs
"D210 - Backbone networks and infrastructure"**

Interview questions

1. The purpose, object and subject of scientific research, scientific direction and its structural units.
2. Work on the current maintenance of bridge supports and bridge bed.
3. Assessment of the technical condition of bridges.
4. General characteristics of specific soils.
5. Foundations on weak clay water-saturated soils.
6. Fundamentals of similarity theory and dimension analysis in the study of transport equipment.
7. Mathematical methods of planning and conducting research of transport equipment.
8. Methods of analysis of factors of the production environment (working conditions of transport equipment).
9. Railway track on bridges and tunnels.
10. The main provisions of the design of bridges and pipes.
11. Operation of bridges and pipes on railways
12. Protection of foundations and foundations from surface and groundwater.
13. Features of construction of transport facilities in difficult climatic conditions: in mountainous terrain, in rocky soils.
14. Characteristics of standard and unified superstructures.
15. Construction of bridge spans of arched, frame and combined systems.
16. Ensuring the safety, continuity, continuity of train traffic.
17. Causes of deformations of buildings and structures in difficult ground conditions.

18. Foundations on technogenic soils.
19. Features of the calculation of the foundations of buildings on saline soils.
20. Features of construction of transport facilities in seismic areas.

The program of the entrance exam was discussed and received a positive decision at the meeting of the Department of «Construction Engineering», Protocol No.10 of 27 Mai, 2024.

Head of the Department
«Magistral Engineering»



_____ **K.S. Kulmanov**

The program of the entrance exam was reviewed and recommended at the meeting of the Council of the Institute of «Transport Engineering», Protocol No 5a of Mai , 2024.

Chairman of the CI «Transport Engineering»



_____ **Sh.A. Abdreshov**