

«Mukhamedzhan Tynyshpayev ALT University» JSC

Department of Construction engineering

APPROVED
Chairman of the ACALT University
S. Amirgaliyeva

Decision of the Academic Council of ALT University
dated "30" 05 2024 (protocol No. 9)

**ADMISSION EXAM PROGRAM
(INTERVIEW) FOR APPLYING TO
POST-GRADUATE EDUCATION PROGRAMS**

Educational program
7M07162- Transport Infrastructure Engineering, profile direction

Almaty, 2024

Admission exam (interview) program discussed and received a positive decision at a meeting of the department "Transport engineering", protocol No. 8 dated April 17, 2024.

Head of the department

"Construction engineering"



Kulmanov K.S.

The admission exam (interview) program was reviewed and recommended at a meeting of the Council of the Institute "Transport engineering", protocol No. 8 dated April 26, 2024.

Chairman of the CI "Transport engineering"



Abdreshov S.A.

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1. The purpose of the entrance exam for a group of educational programs

Admission of foreign citizens to study in to **JSC "ALT University named after Mukhamedzhan Tynyshpayev** on paid basis is carried out based on the results of an interview conducted by the admissions committee during the calendar year.

Goals entrance exam (interview) for the Educational program 7M07162-Transport Infrastructure Engineering, is the definition of theoretical and practical preparedness of an applicant for a master's degree, level of compliance with knowledge, skills and skills to the requirements of master's studies in the field of preparation.

2. Regulations for conducting an entrance exam (interview) for a master's program in a group of educational programs

The duration of the entrance exam (interview) is 30 minutes, during which the applicant is interviewed and answers questions from a commission approved by the President-Rector, consisting of 3 members.

At the applicant's choice, entrance The exam (interview) is taken in Kazakh, Russian or English.

Persons who did not appear at the entrance exam (interview) for a valid reason (illness or other circumstances, confirmed by documents), are allowed to participate on other days in accordance with the approved interview schedule.

The interview is conducted in person/remotely with the mandatory use of video communication. The video recording is stored in the archive for no more than three years.

During the interview process, to clarify the knowledge of the candidate/applicant, additional questions may be asked both on the content of the interview question and on any sections of the subject within the program.

The interview protocols are submitted to the executive secretary of the admissions committee immediately after the completion of the interview.

All controversial issues related to the interview are resolved in accordance with the established legislative procedure of the Republic of Kazakhstan.

3. Interview assessment criteria

The interview procedure is documented in a protocol of the established form, in the form according to Appendix No. in which are fixed questions to incoming and interview results.

Evaluation of candidates/applicants is carried out according to the system adopted by the University according to Table 1. Passing the point is the commission's decision on the sufficient level of candidates/applicants for further training master's degree Each interview decision is signed by the committee members.

Protocol interviews enrolled in the university is kept in their personal files.
Table 1 – Interview assessment criteria

Criteria	Descriptors	Level
Motivation	Argumentation of motives for doctoral studies in the chosen EP and admission to a specific university. Vision of prospects for professional and personal growth upon completion of training	sufficient/not sufficient
Research competence	Possession of the research skills and experience necessary for research activities in a specific subject area	sufficient/not sufficient
Creativity	Non-standard thinking, creative and alternative approaches to solving problems and situational tasks	sufficient/not sufficient
Communication skills	The ability to briefly, representatively, logically, and reasonably express one's point of view, make generalizations and conclusions. Language skills	sufficient/not sufficient
Commission decision		sufficient/not sufficient

4. Interview questions

1. Describe the main stages of railway track design.
2. What types of bridges do you know? Tell us about the advantages and disadvantages of each type.
3. Explain what is the stability and durability of bridges and railway structures. What factors influence this?
4. What are the main norms and standards applied in the construction of railways and bridges?
5. What are the main types of railway track repairs do you know? Describe their differences and areas of application.
6. What technologies and methods are used to diagnose the condition of the railway track?
7. Tell us about the methods of eliminating defects and damage to the rails.
8. What materials and technologies are used to strengthen the railway track?
9. Describe the process of adjusting and straightening the railway track.
10. What preventive maintenance methods are used to prevent the deterioration of the railway track?
11. What are the main safety requirements for railway repairs?
12. Tell us about modern innovations in the field of repair and maintenance of railways and artificial structures.
13. How is the condition of the railway track monitored in real time?

14. What measures are being taken to protect the railway track from the effects of weather conditions (for example, snow, rain, high temperatures)?
15. What methods are used to control and eliminate deformations of the railway track?

5. Recommended literature

5.1 Basic literature

1. Railway track. Ashpiz E.S. et al., Moscow: Transport, 2015.
2. Rules and technology for performing basic work with the current content of the path. JSC NC "KTZ" Astana 2019.
3. Badieva, V.V. The construction of a railway track : a textbook / V. V. Badieva. — Moscow : UMTS ZhDT, 2019. — 240 p. — 978-5-907055-63-6.

5.2 Additional literature

1. Railway track. Shakhunyants G.M., M.: Transport, 1987.
2. Railway track and track facilities: terms and definitions. Dictionary-reference book, M: Textbook-method. center for education on railway transport 2008.
3. Maintenance and repair of railway tracks: Textbook for technical schools Tikhomirov V.I., M: Transport, 1987.
4. Fundamentals of geotechnics: Textbook, Isakhanov E.A. et al., Almaty: KazATK, 2007.
5. Maintenance and repair of the ballast prism (ballast base) of the railway track Ibraimov A.K. et al. Almaty: KazATK, 2016.
6. Methodological guidelines for practical classes in the discipline Railway track – 1, Ibraimov A.K., Almaty: KazATK, 2016.
7. Temirzholdardyn kosylulary men kiylysulary. Ibraimov A.K., Tyulubaeva Z.D. Almaty: KazATK, 2019.
8. Provision of dimensions on the backbone network of JSC NC KTZ. Textbook, Ibraimov A.K. et al. Almaty: ALT, 2021.