

«ALT Mukhametzhan Tynyshbayev University» JSC  
Department «Automation and control»

Questions for foreign citizens entering doctoral studies in groups of educational  
Programs «D100 Electrical Engineering and Automation»

Chairman of the ALT University AC

S. Amirkalyeva

Decision of the Academic Council of

ALT University

« 30 » 05 2024 (protocol No. 8)



Interview questions

1. Automatic systems and problems of control and regulation theory
2. Static and dynamic models of automatic control systems and their links
3. Frequency characteristics of typical dynamic links
4. Algebraic stability criteria
5. Typical characteristics of nonlinear links
6. Phase trajectories of nonlinear systems. Limit cycles
7. Phase portraits of nonlinear systems
8. Goldfarb Stability Criterion
9. Tasks and role of microprocessor controllers in the control system of actuators
10. The concept of modeling control objects. Types of modeling
11. Purpose of electrical centralization systems
12. Purpose of dispatch centralization systems
13. Purpose of interval train control systems
14. Purpose of diagnostic systems
15. The concept of reliability and reliability of devices and systems

Interview questions was discussed and received a positive decision at the meeting of the department «Motor vehicles and life safety», Protocol No. 8 of April 2024.

Acting Head of the Department  
«Automation and control»

K. Sansyzbai

Interview questions was reviewed and recommended at the meeting of the Council of the Institute of «Automation and Telecommunication», Protocol No. 5 of April 26, 2024

Chairman of the CI «Automation and  
Telecommunication»

A. Toigozhinova