# JSC «ALT University named after Mukhamedzhan Tynyshpaev»

MYXAMETIKAH
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Interview Program for Applicants to the Specialized Master's Program

Educational Program 7M06135 – IT Systems Management

The entrance examination program was discussed and approved at the meeting of the					
Department of Information and Communication Technologies (ICT), Minutes No. 8 dated April					
17, 2025.					
Head of the ICT Department: D. Kassymova					
The entrance examination program was reviewed and recommended at the meeting of the					
Council of the Institute of Energy and Digital Technologies, Minutes No. 5 dated April 25, 2025.					
Chairperson of the Council of the Institute "E&DT": A.Zh. Toigozhinova					

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# 1. Purpose of the Interview

Admission to the master's program " 7M06135 – IT Systems Management" at JSC "ALT University named after Mukhamedzhan Tynyshpaev" on a tuition basis is conducted based on the results of an interview. Candidates eligible to participate in the interview must have at least 5 years of experience in a managerial position related to the educational program in government or civil service, or at least 10 years of professional experience relevant to the educational program.

The interview is conducted to assess the applicant's level of theoretical and practical knowledge, professional competencies, and motivation for pursuing studies in the master's program.

## 2. Interview Procedure.

The interview for applicants to the master's program is conducted within 30 minutes. During this time, the applicant answers questions from the admissions committee approved by the President-Rector of the university.

At the applicant's choice, the interview may be conducted in Kazakh, Russian, or English. The interview is held either in-person or remotely, with mandatory use of video communication. The video recording is archived by the university for up to three years.

Candidates may be asked additional questions related both to the content of the interview and to other sections relevant to the program profile.

Applicants who do not attend the interview for valid reasons (illness or other documented circumstances) are allowed to take the interview on another day according to the approved schedule.

Interview protocols are submitted to the responsible secretary of the admissions committee immediately after the procedure is completed. All disputed issues related to the interview process are resolved in accordance with the legislation of the Republic of Kazakhstan.

### 3. Interview Evaluation Criteria

The interview is conducted based on an approved standardized protocol, which records the questions asked, the applicant's answers, and the final evaluation.

Candidates are assessed according to the University's internal system based on several criteria reflecting the applicant's level of preparation, professional experience, and motivation. The final decision of the committee is made collectively and documented in a protocol signed by all committee members.

No numerical passing score is established — the committee's decision determines whether the candidate meets the requirements for admission to the master's program.

Interview protocols of admitted applicants are kept in their personal files.

Table 1 - Interview Evaluation Criteria

Criteria	Descriptors	Scores
Motivation	Justification of reasons for applying to the program, choice of university, understanding of goals and prospects for professional and personal growth.	Sufficient
Research Competence	Proficiency in basic research skills necessary for scientific and analytical activities related to the educational program.	Sufficient
Creativity	Ability to propose unconventional solutions and demonstrate a creative approach to analyzing tasks and problems.	Sufficient /
Communication Skills	Ability to clearly and logically express thoughts, justify one's point of view, and draw conclusions.	
Committee Decision		Sufficient / Insufficient

## 4. Interview Questions

- 1. Differences between IT Management and Traditional Management
- 2. Information System Life Cycle
- 3. IT Project Management and Methodology Examples (e.g., Agile, Scrum, Waterfall)
- 4. Key Performance Indicators (KPIs) for Evaluating IT Systems
- 5. Role and Importance of ITIL in IT Service Management
- 6. DevOps Concept and Its Application in System Management
- 7. Stages of Risk Analysis in IT Infrastructure
- 8. Modern Approaches to Information Security in Organizations
- 9. Impact of Cloud Computing on IT Architecture and Management
- 10. Examples of Digital Transformation in Business
- 11. Data Management in Large-Scale Information Systems
- 12. Comparison of Centralized and Decentralized IT Management Models
- 13. Criteria for Selecting Enterprise Information Systems (ERP, CRM, etc.)
- 14. Essential Competencies of an IT Department Manager
- 15. Describe the life cycle of an information system and characterize its key implementation stages.

#### 5. Recommended Literature

#### 5.1 Main Literature

- 1. Kotlyar I. I. IT Project Management: Textbook for Universities. Moscow: Yurayt, 2023.
- 2. Dyachenko V. F. Information Systems and Technologies in Management. Moscow: Forum, 2022.
- 3. ITIL Foundation: IT Service Management Reference Guide. AXELOS, latest edition.
- 4. Hayes B. Information Technology and Enterprise Management. St. Petersburg: Piter, 2021.
  - 5. Sommerville I. Software Engineering (10th Edition). Pearson, 2015.
- 6. Shevchenko L. N. Information Technologies in Management. Moscow: KnoRus, 2020.
- 7. Dyakov A. N. Information Technologies for Business Management. Moscow: Eksmo, 2021.
- 8. Laudon K. C., Laudon J. P. Management Information Systems (16th Edition). Pearson, 2020.
- 9. Martynov V. A. Digital Transformation: Management and Technologies. Moscow: Eksmo, 2022.
- 10. Turban E., Volonino L. Information Technology for Management. Moscow: Williams, 2019.

#### 5.2. Additional Literature

- 1. Schwaber K., Sutherland J. The Scrum Guide. Scrum.org, 2020.
- 2. McKinsey & Company. Digital Transformation: The Road Ahead. McKinsey Reports, 2021.
- 3. Dyakov A. N. IT Service Management: Practical Approaches and Solutions. Moscow: Infra-M, 2020.
- 4. Mikhailov A. A. IT Audit and Information Systems Control. Moscow: Yurayt, 2021.
- 5. Pressman R. S. Software Engineering: A Practitioner's Approach (8th Edition). McGraw-Hill, 2014.
  - 6. Tanenbaum A. S. Computer Networks (5th Edition). St. Petersburg: Piter, 2021.
- 7. Vlasov V. I. IT Infrastructure and Its Management. Moscow: Scientific and Information Center "Infra-M", 2023.
  - 8. Stern N. Digital Economy: Rethinking Management. Moscow: Alpina, 2022.
  - 9. Huawei ICT Academy. Network Technology Fundamentals. Huawei, 2022.
  - 10. Cisco Networking Academy. Introduction to Networks v7.0. Cisco Press, 2021.