

APPROVED
by the decision of the Board
of Directors NPJSC
“Abylkas Saginov
Karaganda Technical
University”
dated April 16, 2026
(Minutes No.3)

RISK REGISTER

FOR 2026

Every year the Company forms a Risk Register to ensure the grouping, identification, and detection of specific risks characteristic of each type of the Company's activity.

The Risk Register includes the following elements:

1. Key development program areas
2. Risk type
3. Risk factor
4. Risk name
5. Risk code
6. Risk level

The risk level involves assessing each risk based on its impact and likelihood of occurrence on a scale of 1 to 5¹.

The Risk Register is generated in the Automated Risk Management System (hereinafter referred to as the ARM) based on data provided by risk owners and an environmental analysis using a multifactorial SWOT analysis, which allows for the identification of risks through an analysis of their potential environment, including the following areas:

S-O – "Strengths-Opportunities": the strength line represents strengths and opportunities for development, implemented through the Company Development Program to achieve the key indicators defined by the Concept for the Development of Science and Higher Education in the Republic of Kazakhstan for 2023–2029².

Three more areas represent potential environments for the emergence of Risk Factors and are aimed at developing preventative measures.

W-O – "Weaknesses-Opportunities": the improvement line includes proposed ways to mitigate shortcomings.

S-T – "Strengths-Threats": the defense line defines the line for leveraging advantages to protect against uncontrollable external factors.

W-T – "Weaknesses-Threats": the prevention line identifies measures necessary to prevent future risks.

All the identified risk factors are entered into the Incident Register, which is maintained in the ARMS.

In accordance with the Company's Charter and structure, the heads of the Company's structural divisions are designated as risk owners.

To improve the effectiveness of the risk management process, an automated risk management system (ARMS) was developed and launched in 2024 located at <http://st.kstu.kz/>. The system provides for the electronic documentation and management of risks.

¹ Risk level = [impact]*[probability]/2

² Decree of the RK Government no. 248 if March 28, 2023

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Based on the completion of the ARMS, a consolidated list of risks is generated. To identify key risks, the identified risks are standardized. Based on the analysis, 37 consolidated risks for the Company were identified.

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RISK REGISTER

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No.	Risk distribution among the Board members	Strategic goal	Risk name	Macroenvironment factor	Risk factor	Risk type	Risk code	Risk level
1.	Chairman of the Board, Rector	Increasing the financial and economic stability and development of the University material and technical base	Risk of decreased productivity of workers	Social status of teachers, salary levels, and support programs for HIPO employees	Decreasing the University income	financial	F2	6
2.	Chairman of the Board, Rector	Increasing the financial and economic stability and development of the University material and technical base	Risk of decreased income of the University	Purchasing power of potential consumers of higher and postgraduate education services Institutional capacity to generate scientific output (citation indices, publications in Scopus/WoS) Government and grant funding: grants for training, research projects, start-ups; funding policy for applied research and R&D	Decrease in contingent Decrease in the effectiveness of research and development and business contractual activities	financial	F1	5
3.	Vice-Rector for Academic Affairs	Consumer focus (employers, students, society)	Risk of decreased the quality of student practical skills	The dynamics of industrial development and the need for new competencies Accelerated technological transformation of industry 4.0 — requirements for digital and engineering competencies	Weak partner ties with enterprises	academic	A1	5
4.	Vice-Rector for digitalization	Ensuring effective management	Risk of non-compliance with information security requirements	Digitalization of the educational process: LMS, AI in learning, AR/VR technologies	Deficiencies in the information security system, failure to comply with information security requirements; loss or access of documents intended for official use.	operational	O1	5

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5.	Vice-Rector for digitalization	Ensuring effective management	Risk of providing false information to external information systems and databases	Digitalization of the educational process: LMS, AI in learning, AR/VR technologies	Failure to complete information in the university's LMS.	Operational	O2	5
6.	Vice-Rector for research	Consumer focus (employers, students, society)	Risk of a decrease in the focus of scientific research on the needs of industry and business	Integrating universities into R&D chains with industrial partners	Lack of sustainable collaboration between specialized departments and industrial enterprises	academic	A2	4,5
7.	Vice-Rector for strategic development and internationalization	Ensuring effective management	Risk of a decrease in international collaborations and publication activity of the university's faculty	International scientific cooperation, Horizon Europe, Erasmus+, PRIMA, and other programs	Weak partnerships with foreign universities	academic	A3	4,5
8.	Vice-Rector for strategic development and internationalization	Ensuring effective management	Risk of a decline in the QS international ranking	Visa policy and international academic mobility: access for international faculty and students; support for dual degree initiatives and international internships	Changes in the QS ranking methodology	strategic	S4	4,5
9.	Vice-Rector for AA	Consumer focus (employers, students, society)	Risk of a decline in the quality of teaching	The dynamics of industrial development and the need for new competencies Accelerated technological transformation of industry 4.0 — requirements for digital and engineering competencies	Changes in the composition of the teaching staff due to various reasons (including the addition of individuals without teaching experience or advanced training certificates in pedagogy)	academic	A4	4
10.	Vice-Rector for research	Focus on consumers (employers, students, society)	Risk of obsolescence of material and technical resources, and their inadequacy for conducting research aligned with the needs of modern industries	Currency fluctuations and import dependence in equipment and scientific instrumentation	Reduction in funding and sponsorship support for departments from enterprises	financial	F3	4
11.	Vice-Rector for AA	Highly Qualified Human Resources	Risk of a lack of growth in supplementary income for faculty members derived from various academic activities	The social status of faculty, salary levels, and support programs for high-potential (HiPo) employees	Low motivation among faculty members to participate in professional development programs, language courses, and	financial	F4	4

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					the development of digital educational resources.			
12.	Vice-Rector for digitalization	Highly qualified human resources	Risk of uncontrolled use of artificial intelligence by students and faculty members	Digitalization of the educational process: LMS, AI in instruction, and AR/VR technologies	Unregulated use of AI by students and faculty (for generating coursework, grading, and creating methodological materials), leading to a decline in academic integrity and actual competencies.	academic	A10	4
13.	Vice-Rector for research	Highly qualified human resources	Risk of decline in the quality of the teaching staff	Institutional capacity for generating scientific output (citation indices, publications in Scopus/WoS)	Lack of continuity across scientific schools, and diminished quality of support for early-career researchers—particularly regarding the preparation for thesis defense.	strategic	S1	3
14.	Vice-Rector for SEW	Focus on consumers (employers, students, society)	Risk of reduced student engagement in social and educational activities	Value shifts among Generations Z and Alpha: expectations regarding flexibility, career trajectories, and social impact	Coercive involvement of students in socio-educational activities (solely to meet quantitative quotas).	strategic	S2	3
15.	Vice-Rector for SDIh	Highly qualified human resources	Risk of non-compliance of the internal quality assurance system with international standards	The social status of faculty, salary levels, and support programs for high-potential (HiPo) employees	Absence of specialized professional development programs tailored to the specific fields of departmental staff.	strategic	S3	3
16.	Vice-Rector for digitalization	Highly qualified human resources	Risk of staff digital competencies failing to meet current requirements	Digitalization of the educational process: LMS, AI in instruction, and AR/VR technologies	Lack of accessible learning resources.	operational	O3	3
17.	Vice-Rector for research	Highly qualified human resources	Risk of a decline in the volume of marketable R&D outcomes at TRL levels 7–9	Commercialization of research through startups, technology parks, and technology transfer	Low quality and/or absence of significant results from scientific and R&D activities with potential for commercialization	academic	A5	3
18.	Vice-Rector for SDI	Ensuring effective management	Risk of a decline in standing within the national institutional ranking among technical universities	Competition from other universities in Kazakhstan	Weakened competitive standing relative to peer universities	strategic	S5	3

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				and the CIS, as well as online platforms				
19.	Vice-Rector for SEW	Focus on consumers (employers, students, society)	Risk of a decline in the number of graduates across TVET, Bachelor's, Master's, and Doctoral programs	Competition from other universities in Kazakhstan and the CIS, as well as online platforms	Failure of academic conditions to fully meet student expectations	strategic	A6	3
20.	Chairman of the Board, Rector	Ensuring effective management	Risk of non-compliance with internal regulations and labor discipline by faculty and staff	Social status of faculty, salary levels, and support programs for high-potential (HiPo) employees	Reduced level of awareness among faculty regarding internal regulations, as well as a lack of time-management skills among faculty and staff members	operational	O4	3
21.	Vice-Rector for research	Focus on consumers (employers, students, society)	Risk of insufficient centralized management of innovation projects	Integration of universities into R&D value chains with industrial partners	Lack of centralized management for innovation projects.	strategic	S6	3
22.	Vice-Rector for AA	Focus on consumers (employers, students, society)	Risk of a decline in the number of students enrolled in supplementary education programs	Commercialization of research through startups, technology parks, and technology transfer	Rising tuition costs; competitors offering courses at rock-bottom prices; low purchasing power among the general public; and intense competition in the provision of non-formal educational services.	academic	A7	3
23.	Vice-Rector for digitalization	Ensuring effective management	Risk of formal implementation of ai lacking managerial or educational impact	Competition from other universities in Kazakhstan and the CIS, as well as online platforms	AI is utilized for reporting purposes (tracking the number of agents, courses, and startups) but exerts no tangible influence on the quality of management, instruction, or research.	strategic	S11	3
24.	Vice-Rector for SDI	Ensuring effective management	Risk of violation of qualification requirements	State Regulation of the Higher Education System (MNVO RK, Government Acts, Presidential Decrees, and Resolutions)	Insufficient provision of material assets that comply with the sanitary rules and norms approved by the authorized body in the spheres of healthcare and fire safety.	operational	O5	2,5
25.	Vice-Rector for SEW	Ensuring effective management	Risk of administrative, corruption-related, and criminal misconduct by students and staff	Licensing and Accreditation Policy: Institutional and Specialized Accreditation; Requirements for	A low level of anti-corruption and legal culture among students and staff	legal	L1	2,5

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				Academic Integrity and Quality Management				
26.	Vice-Rector for AA	Highly Qualified Human Resources	Risk of reduced staff motivation due to unmet salary expectations	Anti-Corruption Culture	Lack of growth in university revenue compared to the previous financial period	financial	F5	2
27.	Vice-Rector for research	Enhancing the financial and economic stability and developing the material and technical base of the university	Risk of declining revenue from the university's research and development activities	The Growing Importance of Academic and Scientific Ethics	An absence of successful applications for grant and targeted program funding, as well as contracts with industrial enterprises for the execution of research and other work	financial	F6	2
28.	Vice-Rector for SEW	Focus on consumers (employers, students, society)	Low motivation among students to participate in scientific, educational, creative, athletic, and other activities	The social status of faculty, salary levels, and support programs for high-potential (HIPO) staff	The risk of a decline in the number of competitive students (those who have received awards at a level no lower than the top three) and/or those possessing commercially viable developments	operational	O6	2
29.	Vice-Rector for AA	Ensuring effective management	Risk of non-compliance with regulations governing the awarding, disbursement, and amounts of state scholarships for students	Digitalization of the Educational Process: LMS, AI in Education, and AR/VR Technologies	Timely entry of final grades for students by instructors in the electronic gradebook.	legal	L2	2
30.	Vice-Rector for digitalization	Ensuring effective management	Risk that developed AI agents fail to align with actual administrative and educational objectives	Digitalization of the Educational Process: LMS, AI in Education, and AR/VR Technologies	Development and implementation of AI solutions (agents, courses, startups) without clear alignment with the university's strategy and the priorities of its educational and research activities.	strategic	S10	2
31.	Vice-Rector for AA	Enhancing the financial and economic stability and developing the material and technical base of the university	Risk of reduced labor productivity within the educational process	The social status of faculty, salary levels, and support programs for high-potential (HiPo) employees	Decline of the University revenue, expansion of staff in academic structures.	financial	F7	1,5
32.	Vice-Rector for AA	Highly qualified human resources	Risk of a decline in the number of recognized professionals serving as instructors	The social status of faculty, salary levels, and support programs for high-	Low motivation to participate in industry competitions, scientific research, and acceleration programs	strategic	S7	1,5

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No.	Risk distribution among the Board members	Strategic goal	Risk name	Macroenvironment factor	Risk factor	Risk type	Risk code	Risk level
				potential employees (HiPo)				
33.	Vice-Rector for research	Highly qualified human resources	Risk of a decline in the number of potential R&D outcomes protected by intellectual property titles	Institutional capacity for generating scientific output (citation indices, publications in Scopus/WoS)	Low quality and/or absence of significant results in scientific and R&D activities	academic	A8	1,5
34.	Vice-Rector for AA	Focus on consumers (employers, students, society)	Risk of a decline in the average starting salary of graduates	The accelerated technological transformation of Industry 4.0: requirements for digital and engineering competencies	Incomplete alignment of graduates' competencies with employer expectations	strategic	S8	1,5
35.	Vice-Rector for digitalization	Ensuring effective management	Risk of failing to achieve the requisite level of digital maturity in accordance with the methodology of the Ministry of Education and Science of the Republic of Kazakhstan	Digitalization of the educational process: LMS, AI in education, and AR/VR technologies	University infrastructure lagging behind the current level of IT technology development	strategic	S9	1,5
36.	Vice-Rector for SEW	Enhancing the financial and economic stability and developing the material and technical base of the university	Risk of a decline in revenue generated from fundraising and socio-educational activities	The influence of media, digital platforms, and social networks on the perception of a university's brand	Passivity of stakeholders in the implementation of socially significant projects for the university	Financial	F8	1
37.	Vice-Rector for AA	Ensuring effective management	Risk of non-compliance with requirements for the annual updating of the educational literature collection, broken down by the disciplines of the educational programs	Value shifts among Generations Z and Alpha: expectations regarding flexibility, career trajectories, and social impact	Absence of requests from academic departments for the acquisition of literature for educational programs	academic	A9	1