DEVELOPMENT STRATEGY
JSC "INTERNATIONAL UNIVERSITY OF INFORMATION TECHNOLOGIES"
for 2022-2025

Almaty - 2022

Contents

Introduction

The International University of Information Technologies (IITU, university) is the leading higher educational institution in the Republic of Kazakhstan in the field of training qualified, internationally recognized ICT specialists.

IITU was established on April 2, 2009 on behalf of the First President of the Republic of Kazakhstan – Nursultan Nazarbayev.

On May 29, 2009, the Ministry of Education and Science of the Republic of Kazakhstan (hereinafter referred to as the Ministry of Education and Science of the Republic of Kazakhstan) issued the University a state license series AB No. 0064060 for educational activities.

The University forms a new generation of specialists in the field of ICT with knowledge of industry technologies, advanced management, economics, and communication skills with in-depth knowledge of the English language.

The proposed Strategy focuses on the most important topics and issues of the future, which highlights research, innovation, digitalization of all business processes of the university as priority areas of activity.

Passport of strategy

Name of the Strategy	Development Strategy of the University JSC "International University of Information Technologies" for 2022-2025
Basis for the development of the Strategy	Law of the Republic of Kazakhstan "On Education" as amended on July 7, 2020; Program of the President of the Republic of Kazakhstan of May 20, 2015 "Plan of the Nation - 100 Concrete Steps"; Strategic Development Plan of the Republic of Kazakhstan until 2025 dated February 15, 2018; Address of the First President of the Republic of Kazakhstan N.A. Nazarbayev to the people of Kazakhstan dated January 10, 2018 "New opportunities for development in the conditions of the fourth industrial revolution";

	Address of the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan dated September 1, 2021 "Unity of the people and systemic reforms are a solid foundation for the country's prosperity" National projects of the Republic of Kazakhstan 2021-2025: Quality education "Educated Nation", Ulttyk rukhani zhangyru, Technological breakthrough due to digitalization, etc. State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020 - 2025 State Program "Digital Kazakhstan", approved by the Decree of the Government of the Republic of Kazakhstan on December 12, 2017 No. 82
Strategy Developer	Working Group on development of the Development Strategy of the University JSC "International University of Information Technologies" for 2022-2025
Objectives of the Strategy	Trainingof highly qualified specialists for the digital economy, competitive in the international labor market.
Timeline for the implementation of the Strategy	2022 – 2025
Sources of funding	Budgetary funds of the Republic of Kazakhstan; With the university's facilities; Other funds not prohibited by the legislation of the Republic of Kazakhstan.

Achievements and analysis of the current state

In May 2012, IITU successfully passed the state certification of the Ministry of Education and Science of the Republic of Kazakhstan, in connection with which the University was assigned a low level of risk, which allows it to conduct state certification once for five years.

On June 21, 2012, the University received a license for the training of scientific personnel in the PhD doctoral program in the specialized specialties of the university.

On May 8, 2013, the University received scientific and scientific-technical accreditation of the Ministry of Education and Science of the Republic of Kazakhstan and on July 4, 2018 passed the re-accreditation procedure (Certificate of Accreditation series MK No. 005200).

In December 2014, the University passed institutional and specialized accreditation of the independent Agency of the Republic of Kazakhstan for Quality Assurance in Education.

In 2016, the Dissertation Council on Information Systems was opened at IITU.

The direction of training specialists in Information Security of the IITU is one of the strongest in Kazakhstan. On December 14, 2017, together with the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan, the Competence Center for Cybersecurity was established.

Educational programs of the IITU consistently occupy leading places in the national ratings of the Republic of Kazakhstan, in connection with which the Ministry of Education and Science of the Republic of Kazakhstan expressed high confidence in appointing in 2018 the University the status of the Educational and Methodological Association of the Republican Educational and Methodological Council of the Republic of Kazakhstan (UMO ROMS) in the areas of training "061 - Information and Communication Technologies" and "063 - Information Security".

On December 5, 2018, with the support of the Ministry of Defense of the Republic of Kazakhstan, the IITU military department specializing in cybersecurity was opened.

In 2019, IITU passed the international specialized accreditation of the leading accreditation agency in Europe ASIIN (Agency for Accreditation of Educational Programs in the Field of Engineering, Informatics, Natural Sciences and Mathematics, Germany) and became the first university of the Republic of Kazakhstan to receive international institutional accreditation for 5 years.

IITU implements double-degree educational programs and academic mobility programs with universities in the USA, Germany, Russia, France, Switzerland, South Korea, Malaysia, China, etc.

In 2020, the faculties "Digital Transformations" and "Computer Technologies and Cybersecurity" were formed. IITU is an ambassador for Coursera.

In 2021, more than 5,000 undergraduate, graduate and PhD doctoral students study at the university (Fig. 1). A multifunctional auditorium named after academician K.A. Sagadiev was opened, and the Department of Cybersecurity was organized. The map of achievements (Fig.2) shows the main achievements for all the years of the university's activity.

Directions of educational programs:
Bachelor:
1. 6B032 Journalism and Information
2. 6B061 Information and communication technologies
3. 6B063 Information security
4. 6B062 Telecommunications
5. 6B041 Business and Management
Master:
1. 7M061 Information and communication technologies
2. 7M062 Telecommunications

3. 7M041 Business and Management

Doctoral studies:

8D061 Information and communication technologies
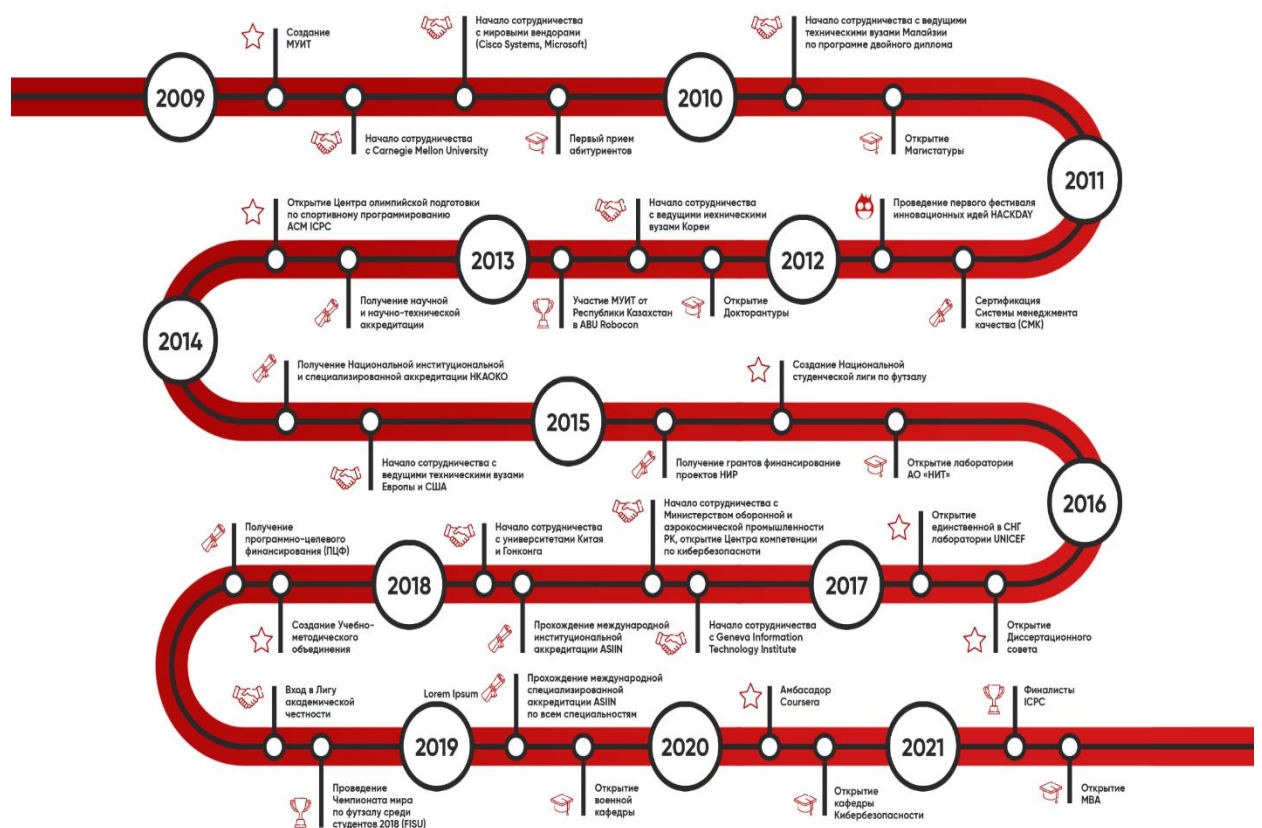

Figure 1. Contingent of students

Figure 2. Map of achievements of JSC "IITU"

University in figures:

400 teaching staff, including 131 with academic titles and degrees, 50 Educational programs, 5000 students, 5400 graduates.

Educational and scientific laboratories:

OLYMPIC CENTER TRAINING

TV-STUDIO

LABORATORY ROBOTICS

LABORATORY OF DIGITAL TRANSFORMATIONS BUSINESS PROCESSES

MIXED REALITYLABORATORY

RADIO STUDIO

Analysis of the factors of the internal and external environment of the university

Strengths**:**
• Leader in ICT education;
• UMO ROMS in the areas of IT personnel training;
• Leadership in international ICPC competitions;
• Three-level training;
• Own unique educational programs;
• High-quality teaching staff;
• Implementation of educational programs in English;
• Access to global online platforms (Coursera);
• Distance learning system;
• Center for Support of Innovative Startup Projects and R&D;
• Laboratories of world IT companies;
• Specialized Military Department;
• Dissertation Council on Information Technologies;
• Commitment to the policy of academic integrity;
• High percentage of employment of graduates;
• Active and vibrant student life.

Opportunities:
• Digital transformation of the university;
• Attraction of funded research and development;
• Expanding partnerships with leading ICT companies;
• Employment in leading ICT companies;
• Maintaining a favorable environment for investment;
• Increase in profits due to diversification of activities;
• Development of fundraising programs.

Weaknesses :
• Fragmented automation of business processes;
• An increase in training areas is required;
• Small number of funded research projects;
• Competition for personnel with the IT industry;
• Low proportion of foreign teachers and students;
• Low growth of the number of staff with scientific degrees;
• Low diversification of services;
• A small number of joint and double-degree educational programs with top universities.

Threats:
Outflow of teaching staff to commercial IT structures;
• Reducing the level of prestige of the academic profession;
• Entry of foreign universities into the Kazakhstan market;
• Devaluation of the national currency;
• Reducing the level of solvency of the population;
• Weak level of English proficiency among applicants and teaching staff.

Mission. Strategic goal. Vision

The mission of the IITU is the formation of competencies in the field of digital economy and society.

The strategic goal is to train highly qualified specialists for the digital economy, competitive in the international labor market.

Vision

The leading educational, scientific and innovative center of the Central Asian region in the field of ICT technologies.

Values of the university:

- Academic honesty;
- Leadership and excellence;
- Innovative orientation;
- Focus on the result;
- Sustainable development and financial performance;
- Cooperation.

Strategic directions of activity.

Strategic areas of activity:

- Integration of the university into the world scientific and educational space;
- Academic excellence and management of educational and social activities of the university;
- Development of scientific and innovative activities in ICT and related sectors of the digital economy;
- Digital transformation, improvement of the management model and personnel policy of the university;
- Financial and economic model of sustainable development of the university.

Aims, objectives, targets and success criteria for each direction are indicated separately.

1. INTEGRATION OF THE UNIVERSITY INTO THE WORLD SCIENTIFIC AND EDUCATIONAL SPACE

AIM	OBJECTIVES	TARGETS AND SUCCESS CRITERIA	RESOURCES NEEDED
Positioning in the leading national and world rankings of universities	- Promotion of the university's position in the world rankings QS WUR, QS by Subject, Webometrics - Maintaining leading positions in national ratings - Expansion of comprehensive cooperation with 10 leading foreign IT universities - Promotion of the IITU brand in the global educational space	- Positioning in the world ranking of Universities QS, Webometrics - International institutional accreditation in foreign agencies - Share of Education Programmes within the framework of international specialized accreditation - Share of educational programs included in the top three national ratings - Number of agreements with leading foreign universities - Entry of the university into international consortia of universities - Number of publications and speeches in various media - Number of events held as part of brand promotion and career guidance	- Budget: attracted investments, planned income of the university - Human Resources: University Stakeholders - Infrastructure of the university: material and technical base, information management systems, buildings and squares, etc.

2. ACADEMIC EXCELLENCE AND MANAGEMENT OF EDUCATIONAL AND SOCIAL ACTIVITIES OF THE UNIVERSITY

AIM	OBJECTIVES	TARGETS AND SUCCESS CRITERIA	RESOURCES NEEDED

Improvement of educational content for the formation of professional, digital and social competencies and increasing the level of human capital	-Formation of a portfolio of competitive educational programs of the university at all levels of study (interdisciplinary, joint and double-degree educational programs) -Ensuring the implementation of the concept of continuing education, increasing educational products and expanding the target groups of service recipients (additional education, certification, advanced training and retraining courses) -Implementation of European standards for quality assurance of education and the principles of academic integrity -Internationalization of the educational process and development of academic mobility of students and teaching staff -Development of student self-government, aimed at ensuring the social activity of young people in all spheres of life.	- Interdisciplinary Educational Programs - Joint Education Programmes with universities and employers - Double Degree Programs - Implementation of inclusive education - Education and preparation for certification of ICT specialists in cooperation with vendors - MOOC University - Number of participants in additional training courses - Share of employed graduates - Membership in the League of Academic Integrity - Proportion of students satisfied with the quality of training - Average level of teaching staff degree; - Attraction of foreign teachers and students - Academic mobility of teaching staff and students - Proportion of students satisfied with student life	- Budget: attracted investments, planned income of the university - Human Resources: University Stakeholders - Infrastructure of the university: material and technical base, information management systems, buildings and squares, etc.

3. DEVELOPMENT OF SCIENTIFIC AND INNOVATIVE ACTIVITIES IN ICT AND RELATED INDUSTRIES OF THE DIGITAL ECONOMY

AIM	OBJECTIVES	TARGETS AND SUCCESS CRITERIA	RESOURCES NEEDED

| Development of research and innovation activities | - Implementation of research and development work corresponding to the world level
- Development of research infrastructure and material and technical base of scientific research
- Creation of IITU scientific schools, attraction and support of research teams, leading researchers and teams in the areas of their activities
- Creation of conditions for commercialization of the results of innovative activity, attraction of investments | - State-funded scientific and technical grants/projects with leading world and domestic research centers, higher education institutions and industrial enterprises
- Foreign funded scientific, technical and other grants/projects with leading world and domestic scientific centers, higher educational institutions and industrial enterprises
- Initiative scientific and technical projects within the framework of the activities of IITU scientific schools
- Formation of specialized research laboratories through funded R&D
- Opening/renovation of joint centers and laboratories with leading IT companies
- Creation and development of scientific schools
- Share of participating in the system of stimulation and motivation of publication activity and research
- Proportion of students participating in scientific projects and programs
- Increase of publications in rating editions WoS, Scopus
- Proportion of teaching staff participating in R&D
- Registration and filling in the profiles of the teaching staff in scientific social networks
- Share of defended PhD dissertations
- Number of startup projects that have been accelerated
- Number of commercial projects | - Budget: attracted investments, planned income of the university
- Human Resources: University Stakeholders
- Infrastructure of the university: material and technical base, information management systems, buildings and squares, etc. |

4. DIGITAL TRANSFORMATION, IMPROVEMENT OF THE MANAGEMENT MODEL AND PERSONNEL POLICY OF THE UNIVERSITY

AIM	OBJECTIVES	TARGETS AND SUCCESS CRITERIA	RESOURCES NEEDED
Digital transformation of the university and ensuring the perfection of all business processes.	-Digital reengineering of all business processes of IITU -Digitalization of the educational process based on the life cycle of students from admission to graduation and the development of digital learning systems -Formation of a successful external and internal HR brand of the university -Implementation of strategic HR and talent management -Creation of a management system based on the principle of continuous improvement, economic incentives and motivation	- Share of digitalization of business processes -Share of educational digital learning content -Share of digitalization of the life cycle of students from admission to graduation -Turnover rate administrative staff/teaching staff -Share of administrative staff/teaching staff of the university who have undergone advanced training and /or retraining, certification. -Percentage of employees (administrative staff/teaching staff) covered in the system of economic incentives and motivation to achieve strategic indicators	- Budget: attracted investments, planned income of the university - Human Resources: University Stakeholders - Infrastructure of the university: material and technical base, information management systems, buildings and squares, etc.

5. FINANCIAL AND ECONOMIC MODEL OF SUSTAINABLE DEVELOPMENT OF THE UNIVERSITY

AIM	OBJECTIVES	TARGETS AND SUCCESS CRITERIA	RESOURCES NEEDED
Achieving profitability of financial and economic activities of the university 20%	- Formation of the income component from the main and related activities - Formation of a multi-level system of attracting financial and other resources from internal and external sources. - Formation of the university campus as an attractive environment for the implementation of educational, research, innovation activities, accommodation, leisure and sports of students and university staff	- Contingent of students - Share of students paid training - Proportion of foreign students - Fundraising - Share of income from additional types of training - Share of capitalization from research activities - Share of revenues from commercial projects - Increase in capitalization due to internal sources - Construction of a dormitory - Development of the infrastructure of educational buildings	- Budget: attracted investments, planned income of the university - Human Resources: University Stakeholders - Infrastructure of the university: material and technical base, information management systems, buildings and squares, etc.

Annex 1. Roadmap of the Strategy for 2022-2025

Aim	Objectives	Targets	Unit	2022	2023	2024	2025
1. INTEGRATION OF THE UNIVERSITY INTO THE WORLD SCIENTIFIC AND EDUCATIONAL SPACE							
Positioning in the rankings of leading national and world universities	1.1 Promotion of the university's position in the world rankings QS WUR, QS by Subject, Webometrics	1.1.1 Positioning in the QS, Webometrics World University Rankings	place	Filling out the profile / Webometrics +20000	Filling Profile / Webometrics +17000	Filling Profile / Webometrics +15000	Q S / Webometrics +12000
		1.1.2 International institutional accreditation in foreign agencies	Availability	+	Re-accreditation +	+	+
		1.1.3 Share of Education Programmes within the framework of international specialized accreditation	%	60	60	70	80
	1.2 Maintaining a leading position in	1.2.1 Share of educational programs included in the top three of the Atameken rating	%	60	60	70	80

national rankings						
1.3 Expansion of comprehensive cooperation with 10 leading foreign IT universities	1.3.1 Number of agreements with leading foreign universities	agreements	2	4	6	8
	1.3.2 Entry of the university into international consortia of universities	consortia	1	1	2	2
1.4 Promotion of the IITU brand in the global educational space	1.4.1 Number of publications and speeches in various media	publications	12	15	18	21
	1.4.2 Number of events held as part of brand promotion and career guidance	events	11	13	15	18

2. ACADEMIC EXCELLENCE AND MANAGEMENT OF EDUCATIONAL AND SOCIAL ACTIVITIES OF THE UNIVERSITY

Improvement of educational content for the formation of professional, digital and social competencies and increasing the level of human capital	2.1 Formation of a portfolio of competitive educational programs of the university at all levels of study (interdisciplinary, joint and double-diploma educational programs)	2.1.1 Interdisciplinary educational programs	EP	5	6	7	8
		2.1.2 Joint Education Programmes with universities and employers	EP	4	5	6	7
		2.1.3 Double Degree Programs	EP	2	4	6	8
		2.1.4 Implementation of inclusive education within one Education Programmes	%	25	50	75	100
	2.2 Ensuring the implementation of the concept of continuing education, increasing	2.2.1 Training and preparation for certification of ICT specialists in cooperation with vendors	People	30	40	50	50
		2.2.2 MOOCs of the University	MOOC	2	2	4	4
		2.2.3 Number of participants in additional training courses	People	50	100	150	200

	educational products and expanding the target groups of recipients of services (additional education, certification, advanced training and retraining courses)						
	2.3 Implementation of European standards for quality assurance of education and the principles of academic integrity	2.3.1 Employment of graduates	%	85	90	90	90
		2.3.2 Membership in the League of Academic Integrity	availability	+	+	+	+
		2.3.3 Proportion of students satisfied with the quality of training	%	85	90	90	90
		2.3.4 Average teaching staff degree	%	40	42	44	44

Improvement of educational content for the formation of professional, digital and social competencies and increasing the level of human capital	2.4 Internationalization of the educational process and development of academic mobility of students and teaching staff	2.4.1 Proportion of foreign teachers	% of standard teaching staff	2	2	3	3
		2.4.2 Academic mobility of teaching staff abroad	% of standard teaching staff	1	1	1	1
		2.4.3 Academic mobility of students abroad	% of number of students	3	5	6	6
		2.4.4 Incoming academic mobility of students	% of number of students	0,5	0,5	1	1
	2.5 Development of student self-government aimed at ensuring the	2.5.1 Proportion of students satisfied with student life	%	90	90	90	90

		social activity of young people in all spheres of life.						

3. Development of scientific and innovative activities in ICT and related sectors of the digital economy

Development of research and innovation activities	3.1 Implementation of research and development work corresponding to the world level	3.1.1 State funded scientific and technical grants/projects with leading world and domestic scientific centers, higher educational institutions and industrial enterprises	projects	4	4	5	6
		3.1.2 Foreign funded scientific, technical and other grants/projects with leading world and domestic scientific centers, higher educational institutions and industrial enterprises	projects	2	2	3	3
		3.1.3 Initiative scientific and technical projects within the framework of the activities of IITU scientific schools	projects	3	3	4	5
	3.2 Development of research	3.2.1 Formation of specialized research laboratories at the expense of funded R&D	%	4	5	7	8

	infrastructure and material and technical base of scientific research	3.2.2 Opening/ renovation of joint centers and laboratories with leading IT companies	labs	2	3	4	4
Development of research and innovation activities	3.3 Creation of IITU scientific schools, attraction and support of research teams, leading researchers and teams in the areas of their activities	3.3.1 Establishment and development of scientific schools	Scientific schools	-	1	1	2
		3.3.2 Share of teaching staff participating in the system of stimulation and motivation of publication activity and research	% of teaching staff	10	15	15	20
		3.3.3 Proportion of students participating in scientific projects and programs	% of students	0,5	1	1,5	2
		3.3.4 Growth of publications in rating editions WoS, Scopus	% of publications	5	8	12	15
		3.3.5 Proportion of teaching staff participating in R&D	% teaching staff	10	12	15	15

		3.3.6 Registration and filling out of teaching staff profiles in scientific social networks	% teaching staff	55	70	85	90
		3.3.7 Share of defended theses	%	5	5	7	10
	3.4 Creation of conditions for commercialization of innovation results, attraction of investments	3.4.1 Number of startup projects that have been accelerated	projects	1	3	5	6
		3.4.2 Number of commercial projects	projects	2	3	3	4
4. DIGITAL TRANSFORMATION, IMPROVEMENT OF THE MANAGEMENT MODEL AND PERSONNEL POLICY OF THE UNIVERSITY							
Digital transformation of the university and ensuring the perfection of all business processes of activity.	4.1 Digital reengineering of all IITU business processes	4.1.1 Share of digitalization of business processes	%	30	40	55	75
	4.2 Digitalization	4.2.1 Share of digital learning educational content	%	15	25	50	50

	of the educational process based on the life cycle of students from admission to graduation and development of digital learning systems	4.2.2 Share of digitalization of the life cycle of students from admission to graduation	%	40	60	70	80
	4.3 Formation of a successful external and internal HR brand of the university	4.3.1 Turnover rate of administrative staff	% of employees	20	15	10	8
		4.3.2 teaching staff turnover rate	% of employees	30	25	18	12
	4.4 Implementati	4.4.1 Share of administrative staff/teaching staff of the university who have undergone	% administr	25	25	25	25

	on of strategic HR and talent management	advanced training and / or retraining, certification	ative staff			
			% teaching staff	25	25	25	25
	4.5 Creation of a management system based on the principle of continuous improvement, economic incentives and motivation	4.5.1 Proportion of staff (administrative staff/teaching staff) covered in the system of economic incentives and incentives to achieve strategic indicators	% administrative staff	0	50	75	80
			% teaching staff	50	70	90	100

5. FINANCIAL AND ECONOMIC MODEL OF SUSTAINABLE DEVELOPMENT OF THE UNIVERSITY

Achieving profitability of financial and economic activities	5.1 Formation of the income component from the main	5.1.1 Contingent of trainees	People	5400	5700	6000	6000
		5.1.2 Proportion of students with paid education	%	10	12	15	15
		5.1.3 Proportion of foreign students	%	0,2	0,7	1,2	2

of the university 20%	and related activities	5.1.4 Fundraising	million tenge per year	5	7	9	12
		5.1.5 Share of income of additional types of training	%	0,1	0,15	0,3	0,5
	5.2 Formation of a multi-level system for attracting financial and other resources from internal and external sources	5.2.1 Share of capitalization from research activities	%	4	6	8	10
		5.2.2 Share of revenues of commercial projects	%	0,05	0,1	0,15	0,3
		5.2.3 Increase in capitalization due to internal sources	%	3	5	7	10
	5.3 Formation of the university campus as an attractive environment for the implementati	5.3.1 Construction of a dormitory	%	10	70	100	-
		5.3.2 Upgrading the campus infrastructure	thousand sq.m. per year	3	3	3	3

	on of educational, research, innovation activities, accommodation, leisure and sports of students and employees of the university						