

THE PROGRESS REPORT OF THE CHAIRMAN OF THE BOARD - THE RECTOR OF IITU JSC KHIKMETOV ASKAR KUSUPBEKOVICH

# OF INTERNATIONAL INFORMATION TECHNOLOGY UNIVERSITY JOINT STOCK COMPANY FOR 2022-2023 ACADEMIC YEAR

## Messages of the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan

"A Fair State. One Nation. Prosperous Society" (01.09.2022)



"The Economic course of a Just Kazakhstan" (01.09.2023)

"...The next important issue is the state of the education system, which plays a crucial role in increasing the nation's potential.

Endowment funds at universities should become a key link in the development of the educational ecosystem. In the world's leading universities, such endowment funds are the basis for sustainable financing of science and innovation. The basic factor in improving the welfare of the people is the growth of wages in line with market conditions..."

"...The educational system needs transformation to meet the labor market's demands. Several sectors of the national economy are experiencing labor shortages, especially in technical and working professions. We need to focus on relevant education, and educational institutions should build long-term partnerships with potential employers ..."





#### **IITU Mission**

developing competencies in the field of digital economy and society

# IITU development strategy for 2022-2025

#### Vision

Leading educational, scientific and innovation center of the Central Asian region in the field of ICT technologies.

#### **Values**

Academic integrity, leadership and excellence, innovation focus, results orientation, sustainable development and financial performance, cooperation.

## Strategic goal

training highly qualified specialists for the digital economy who are competitive in the international labor market.

#### **Strategic areas**

No.	Name of the strategic area	Indicators	Performance	Effectiveness
1	Integration of the university into the global scientific and educational space		9	
2	Academic excellence and management of the university's educational and social activities	16	14	
3	Development of scientific and innovative activities in ICT and related sectors of the digital economy	14	13	90%
4	Digital transformation, improvement of the university's management model and personnel policy	8	7	
5	Financial and economic model of university sustainable development	10	8	

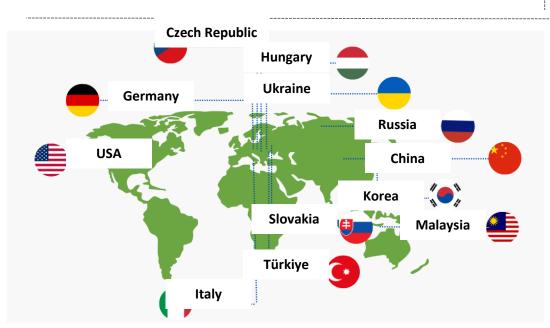
#### Integration of the university into the global scientific and educational space



Reporter World University Rankings 2024

# International IT University

On September 27, 2023, IITU was included in the 2024 Times Higher Education ranking of world universities with **Reporter** status.





#### **Double degree programs:**

- Inha University, South Korea for EP IT Project Management (Master's program)
- Adam Mickiewicz University, Poland for EP

   Journalism (Bachelor's and Master's programs)
- Hof University, Germany for EP Computing and Software and Information Security Systems
- UNITEN University, Malaysia for Financial Engineering

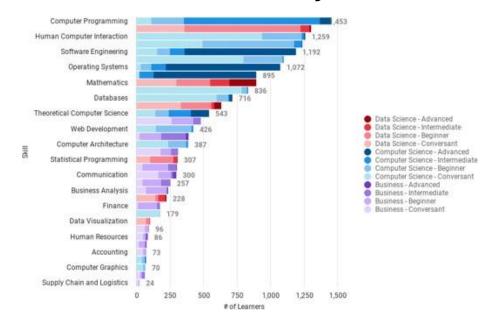








# **Learner Performance by TOP Skills**



2021. Increasing the number of licenses to 2,500 for undergraduates and faculty members in order to improve their qualifications;

For 2023, the total number of licenses for students, master's/doctoral students, faculty members and administrative and managerial personnel – 5,000.

2020. The first introduction of Coursera for Campus courses into the educational plan in the amount of 2200 licenses for 2-3 year students;

2022. Purchase of additional 500 licenses, totaling the total number of subscriptions to the platform -3,000.

Number of unique courses completed

Year	Number of unique courses completed	Number of mandatory unique courses	Number of non- mandatory courses completed
2020	337	67	270
2021	335	124	211
2022	599	65	534
Overall	1271	256	1015

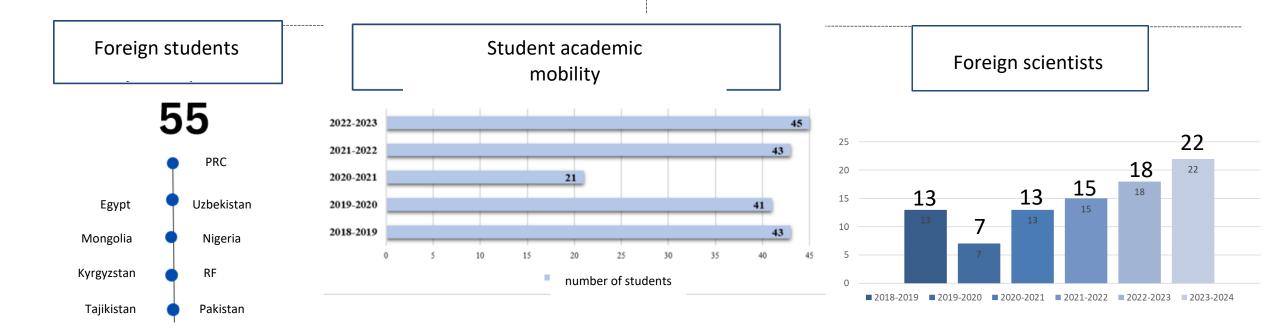


#### **Problems**

- Financial difficulties that arise when nominating students under the academic mobility program.
- Difficulties in obtaining a visa when preparing documents for studying during the academic period.
- Lack of its own dormitory and University facilities.
- Insufficient interest of faculty members in participating in international projects.

#### Objectives

- Search for potential partners and implementation of educational programs within the framework of double-degree education as the most important means of increasing the competitiveness of a university in the global market of educational services;
- Ensuring participation in the QS Stars, THE Impact programs and other significant world and national ratings.



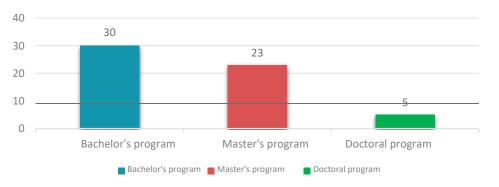
#### Academic excellence and management of the university's educational and social activities







#### Number of educational programs



#### Joint educational programs:

- S.Seifullin Kazakh Agro Technical University;
- Kokshetau University named after Sh. Ualikhanov;
- S. Amanzholov East Kazakhstan University;
- Scientific Research Institute of Genetics and Physiology.

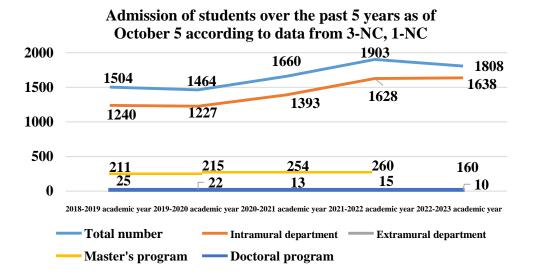
Educational and Methodological Association of the Republican Educational and Methodological Council - IITU is a basic university in the areas of ICT and IS

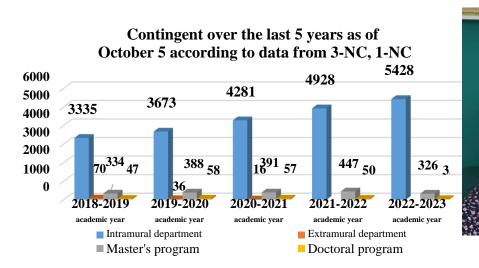
#### Rating of educational programs for the 2022-2023 academic year

SEP	Name of specialty (Bachelor's program EP)	Atameken	IAAR	IQAA
B042	Journalism	1st rank	5th rank	1st rank
B058	Information Security Systems	1st rank	2nd rank	1st rank
B057	Information Systems	1st rank		
B057	Computer Science	2nd rank		
B057	Mathematical and Computer Modeling	2nd rank		
	(EP Engineering Mathematics)			
B057	Mathematical and Computer Modeling	4th rank	1st rank	1st rank
	(EP Financial Mathematics)			
B057	Mathematical and Computer Modeling (EP Data Science)	5th rank		
B057	Computing and Software	5th rank		
B059	Radio engineering, Electronics and Telecommunications	1st rank	1st rank	2nd rank
B044	Management	11th rank	15th rank	6th rank
B046	Finance	9th rank	14th rank	7th rank











# Major subjects according to SEP B057, B058:

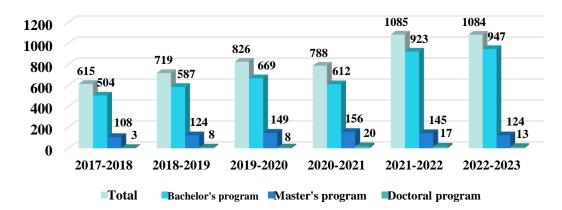
- Mathematics;
- Computer Science.

Passing scores in 2023
80
80
60
80
80
80

#### ONIVERSIT

## Employment of graduates

# **Graduation over the last 5 years for all levels of education**



# NUMBER AND AVERAGE SALARY OF EMPLOYED GRADUATES IN IT PROFESSIONS IN 2019-2022



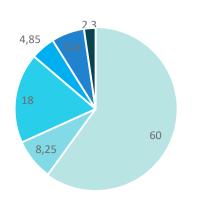
\*IITU – International University of Information Technologies; KBTU - Kazakh-British Technical University; NU – Nazarbayev University; AUPET - Almaty University of Power Engineering and Telecommunications named after G. Daukeev; KazNU - Al-Farabi Kazakh National University; ENU - L.N. Gumilyov Eurasian National University; KSU - Karaganda Technical University.

Source: hr.enbek.kz and Ministry of Labor and Social Protection, as of July 1, 2022

#### **Employment of graduates according to Atameken NCE**

Name of specialty	Emplo	pyment
Name of specialty	2021	2022
Information Systems	82%	82.61%
Mathematical and Computer	79%	89.47%
Modeling		
Computing and Software	82%	87.7%
Radio engineering, Electronics	89%	91.07%
and Telecommunications		
Information Security System	73%	88.1%
Computer Science	77%	78.95%
Journalism	59%	84,00%
Management	86%	88.89%
Finance	85%	90.24%
Total	79.11%	86.78%





Large companies

■ IEs and small companies

Banking sector

Universities and scientific institutes

Mobile operators



## Quantitative and qualitative composition of faculty members

Academic degree holders rate	Doctors of Science	Foreign teachers	Faculty members with foreign education	Average age of faculty members	Staffing of faculty members
47.4 %	30	20	47	40.5 years	421

Department name	Number of teachers
Information Systems	67
Computer Engineering	68
Cybersecurity	49
Radio Engineering, Electronics and Telecommunications	25
Mathematical and Computer Modeling	60
Economics and Business	30
Media Communications and History of Kazakhstan	48
Department of Languages	55
Military Department	19
Total	421

"The Best University Teacher – 2022":

- 1) Kulakaeva Aigul Ergalievna, Assistant Professor of the Department of Radio Engineering, Electronics and Telecommunications;
- 2) Kadirbaeva Zhazira Muratbekovna, Assistant Professor of the Department of Mathematical and Computer Modeling.









#### **IITU Digital Business School**



- for the first time in Kazakhstan, the first 7 graduates of the EMBA "HR GENERAL" EP received Masters of Business Administration diplomas;
- an own ordinary diploma has been developed;
- "HR GENERAL" EP has been accredited by IQAA;
- recruitment for training in the Global Executive MBA EP was completed;
- together with the Department of M&CE and VOICE POWER LLP, the EMBA-"Practical PR and Reputation Marketing" EP was developed;
- to popularize educational programs, the second HR forum was held jointly with the HR-SKY company,











#### Center for Additional Education Results for 2022-2023











Unity for young developers
August 2023



















IOS Summer Camp Digital Nomads

together with iTeacher Academy.

August 2023



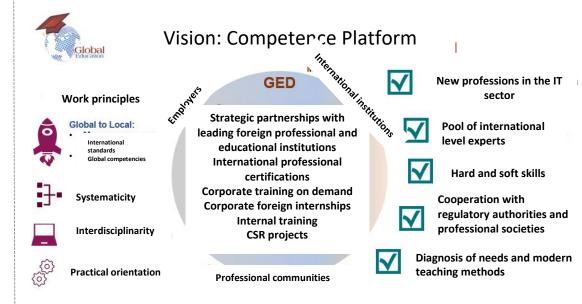


THE CHOP THE PROPERTY OF THE P	
Название микроквалификации	Кафедра
JAVA DEVELOPER	***************************************
COMPUTER SYSTEM ANALYST	NC
CLOUD ENGINEER	
SYSTEM ADMINISTRATOR	
WEB ПРОГРАММИСТ	
МОДЕЛИРОВАНИЕ И ВИЗУАЛИЗАЦИЯ	КИ
РОБОТОТЕХНИКА	

# The need to transform the model of additional education at IITU

- 44% of key employee skills are expected to change in the next 5 years\*
- 6 out of 10 employees will need training by 2027, but only half of them have access and opportunity to receive appropriate training
- ➤ Companies recognize the need for upskilling and reskilling, and only 82% of them plan to invest in training and on-the-job training
- Al and big data are ranked 7th in skills of increasing importance today, and with a forecast of 60% growth in demand until 2027.
- Leadership skills, which rank 9th in the Top Skills 2023 and 11th in the Skills of Increasing Importance, will be the focus of 4 out of 10 corporate strategies for developing employee skills.

#### **Global Education Department**



#### Implementation: how to build a competence platform



#### **Training and activities**

- ✓ Strategic sessions
- ✓ Courses, trainings, master classes
- ✓ Communities of Interest
- Career guidance and mentoring
- Creating own unique online content

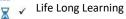
#### Niche and benefits

- Interdisciplinarity with a focus on IT
- Partnerships with professional organizations Skills of the future
- Close integration with
- ✓ business



- ₩ ✓ IT&Tech
- ✓ Corporate Governance and Business
- ✓ Sustainable development (SDGs and ESG)













- 45 mass cultural and patriotic events
- Became prize-winners in three sports at the 12th Universiade (Aktau): chess (2nd place), basketball (3rd place) and togyzkumalak (3rd place)
- Enactus Kazakhstan National Expo 2023 2nd place
- In eSports 1st place in "CS:GO", 2nd place in "DOTA 2", 4th place in "FIFA23"
- 2nd place at the national competition for student entrepreneurship, startups and innovations Enactus Kazakhstan National Expo 2023
- 1st place in the JBR dance competition

#### **Problems**

- Lack of young scientific and teaching staff;
- Insufficient number of classrooms equipped with modern equipment;
- Low public activity of students;
- Insufficient number of teaching and methodological materials for inclusive education.

## **Objectives**

- Successful completion of the International Institutional Reaccreditation procedure with confirmation of the quality of activities of IITU JSC;
- Analysis of the educational outcomes of university educational programs and the policy of assessing students' knowledge;

- Development and implementation of microqualification programs and ensuring collaboration with large companies;
- Development of online education, development of high-quality proprietary MOOCs, provision of additional educational services and attraction of external potential students;
- Organizing meetings of students with eminent graduates and top managers of large employers in collaboration with the Alumni Association;
- Introduction of Integral GPA in order to increase students' activity in social, patriotic, cultural and sports events of the university and the city;
- Intensifying work to support socially vulnerable students and people with disabilities.







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

#### **Research activities**







On June 14, 2023, a certificate of repeated reaccreditation as a subject of scientific and/or scientific and technical activities was received (accreditation certificate series MK No. 00226).

#### Funded scientific projects

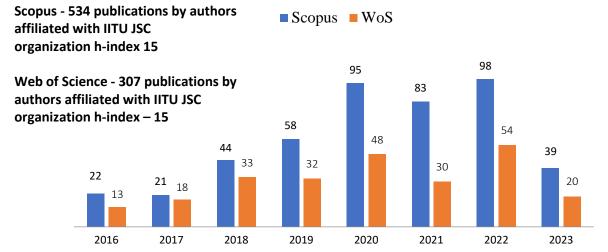
#### Initiative research projects

Projects	Number	Amount of financing
Grant Financing of the Ministry of Science and Higher Education of the Republic of Kazakhstan (2020-2022)	3	KZT 148.9 mln.
Grant Financing of the Ministry of Science and Higher Education of the Republic of Kazakhstan (2022-2024)	2	KZT 155.8 mln.
Grant Financing of Young Scientists of the Ministry of Science and Higher Education of the Republic of Kazakhstan (2022-2024)	1	KZT 74.9 mln.
Grant Financing of Young Scientists of the Ministry of Science and Higher Education of the Republic of Kazakhstan (2023-2025)	1	KZT 74.9 mln.
Commercialization of the results of scientific and (or) scientific and technical activities of Grant Financing of Science Foundation JSC	1	KZT 240.3 mln.
TOTAL	8	KZT 694.8 mln.

Department	Project name	Head
Computer engineering	Development of an ontology-based recommendation system	Chinibaeva T.T., PhD
Media communications and history of Kazakhstan	ommunications and the latest digital media technologies	
Media communications and history of Kazakhstan	Scientific and practical foundations of an integrative approach to career guidance in the context of digital transformation of the educational sphere	Abdullaeva G. O., candidate of pedagogic sciences, associate professor

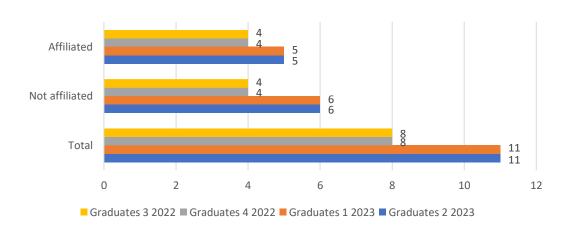
#### Development of scientific and innovative activities in ICT and related sectors of the digital economy

#### **Publication activities**



Publication activity of faculty members in Scopus and Web of Science

#### **International Journal of Information and Communication Technologies**



# IITU publications by fields of knowledge according to the Scopus database for the entire period

Computer Science	336	Energy	19
Mathematics	196	Medicine	18
Engineering	180	Arts and Humanities	12
Physics and Astronomy	71	Biochemistry, Genetics and Molecular	12
Decision Sciences	45	Chemical Engineering	10
Business, Management and Accounting	36	Agricultural and Biological Sciences	9
Social Sciences	36	Chemistry	9
Environmental Science	28	Multidisciplinary	6
Materials Science	27	Economics, Econometrics and Finance	4
Earth and Planetary Sciences	19	Neuroscience	2

#### **Incentive payments**

	2021	2022
Number of articles	39	47
Number of authors	34	28

The amount of payments for articles  $1 \square$  is 90,000 tenge

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

Conferences, forums, scientific seminars, students' research work

VII International Scientific Conference "Digital Technologies in Education, Science and Industry – 2022" (DTESI 2022)

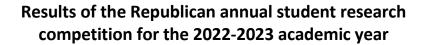


Scopus

IV International Student Scientific and Practical Conference "Youth Digital Forum" (YDF-2023)

International Scientific and Practical Conference "Geopolitics of the New Reality: Kazakhstani and Eurasian experience"

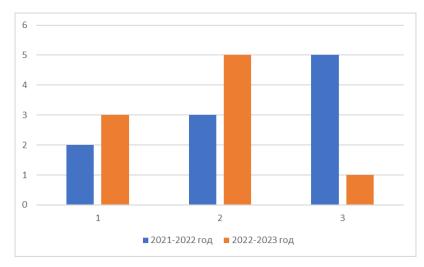
International scientific and practical conference "Journalism of the 21st century: global challenges and national perspectives"



No.	Training program	1st rank	2nd rank	3rd rank
1	Mathematical and Computer Modeling	1		
2	Computer Science	1		
3	Information Systems (Master's program)	1	2	
4	Information Systems (Bachelor's program)		1	
5	Information Security Systems		1	
6	Radio engineering, Electronics and Telecommunications		1	1
	Total	3	5	1







number of prize places in students' research work in 2021-2022 and 2022-2023 academic years

#### Problems

- Lack of qualified scientific personnel to manage the projects of the Grant Financing of the Ministry of Science and Higher Education of the Republic of Kazakhstan, Targeted Financing Program, commercialization of the results of scientific and (or) scientific and technical activities of Grant Financing of Science Foundation JSC, as well as their implementation;
- Problems in the formation of temporary scientific teams;
- Low level of participation of master's and PhD doctoral students in scientific projects;
- Lack of skills in preparing applications for participation in scientific project competitions.

# Objectives

scientific collaboration;

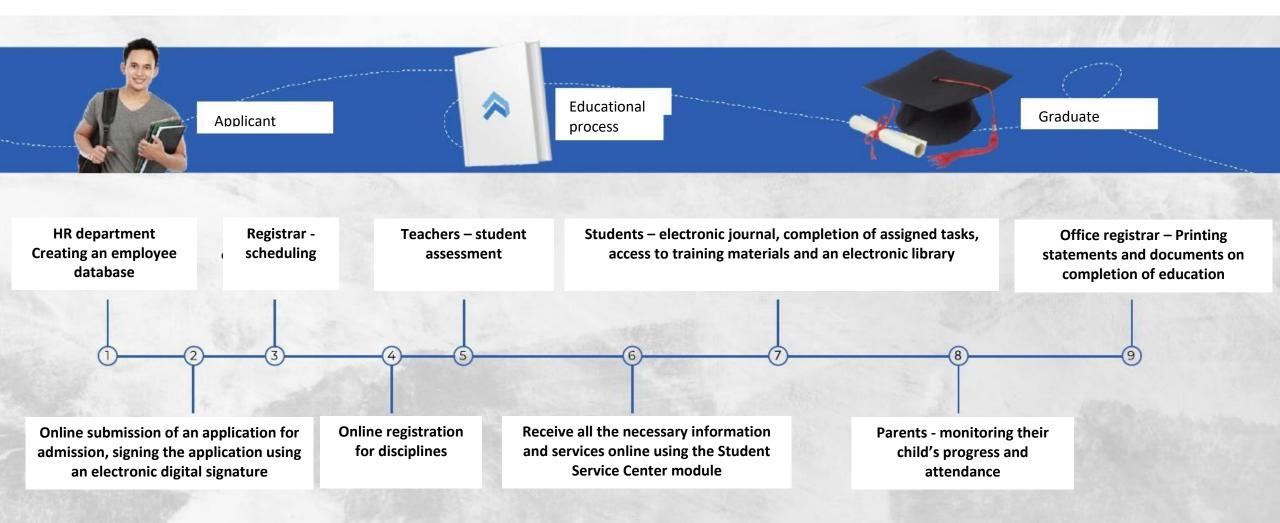
- Preparation of the material and technical base and attraction of scientific and pedagogical personnel to create a scientific school in the direction of "Artificial Intelligence";
   Strengthening ties with leading universities of the Republic of Kazakhstan and abroad for joint research work, training of scientific personnel and
- Development of scientific and professional competencies of faculty members for conducting high-quality scientific research and successful defense of PhD dissertations;
- Development and implementation of a motivation system for PhD Doctoral students;
- Development and implementation of mechanisms for regulating the composition of temporary scientific teams for the quality implementation of research projects;
   Conducting training sessions and seminars(on an ongoing basis) on writing applications for participation in research competitions of the Ministry of Science and Higher Education of the Republic of Kazakhstan, Ministry of Digital Development, Innovation and Aerospace Industry, etc.

#### Digital transformation, improvement of the university's management model and personnel policy



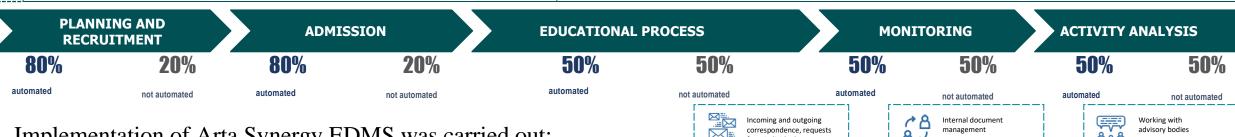
The University, within the framework of a signed memorandum with the Platonus company, was the FIRST to implement the new version of the Platon 6.0 AIS





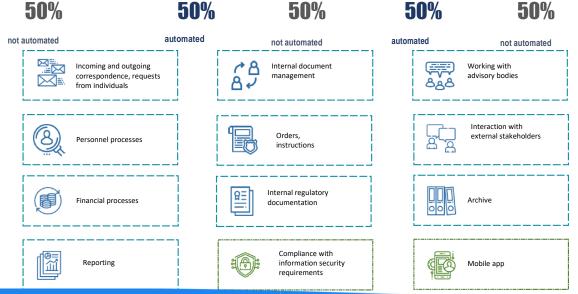
#### Digital transformation, improvement of the university's management model and personnel policy

IITU SYSTEMS (SERVICES AND TOOLS)				
NAME	PURPOSE			
Platonus 6.0 IS	Organization of educational process and administration			
Microsoft Office 365 A3, A5	Organization of internal communications and processes			
Bitrix24 CRM	Customer interaction tool			
Arta Synergy EDMS	Internal and external electronic document management system			
Electronic queue system	Organization and management of queue flows (during the admissions committee)			
Coursera online learning platform	Additional online learning for students			
Open edX online learning platform	IITU online courses for additional education			
Scientific Articles Platform (journal.iitu.edu.kz)	Database of scientific articles and developments			
KPI platform (ratingstaff.iitu.edu.kz)	Platform for assessing the performance of faculty members			
Irbis	University library management system			
Internet resource (iitu.edu.kz)	Information resource			
1C Accounting 8.3	Accounting and management (Accounting, Personnel and Documentation Management Department, analysis of economic activity)			



Implementation of Arta Synergy EDMS was carried out:

- Configuring the EDMS in accordance with internal and external document flows and the organizational structure of IITU
- User training to work in the EDMS



#### **INCUBATION PROGRAM**

#### **PROGRAM MODULES**

- GOAL SETTING AND FEATURES OF WORK IN THE INCUBATOR
- GENERATION OF BUSINESS IDEAS
- HADI CYCLES
- TARGET AUDIENCE AND VALUE PROPOSAL
- MARKET AND COMPETITOR ANALYSIS
- **6** мур
- ZEROCODING
- 8 SEARCH FOR FIRST CUSTOMERS
- CUSTOMER DEVELOPMENT
- 10 FIRST SALE
- RULES OF GOOD PITCHING FOR A STARTUP

A distinctive feature of the IITU Innovation incubation program is its individual approach to each startup. The goal of the program is to help startups achieve success in their industries, and for this we provide all the necessary resources and support.

1 INDIVIDUAL PROJECT SUPPORT

Each startup is assigned a personal mentor with relevant experience and competencies, who will accompany the project throughout the entire incubation program.

3 WORKSHOPS AND SEMINARS

We regularly organize events inviting experts from various industries, where residents can gain valuable knowledge, learn about new trends and approaches in their field.

SERVICES FROM EXPERTS IN ACCOUNTING AND JURISPRUDENCE:

- Consulting on accounting and taxation issues
   Audit and verification of financial statements
- Consulting on legal issues, including legal aspects of intellectual property and patenting

Results of the Business Incubator 10 incubation programs carried out:

Applications 1,324

Selected 342

Graduates 68

ГЕХНИЧЕСКАЯ ЭКСПЕРТИЗА

The IITU Innovation Center provides technical

CONSULTATIONS ON

INNOVATION ISSUES

their advantages and disadvantages, and find

evaluate their effectiveness.

expertise that will allow companies to evaluate the

Experts will check the compliance of the selected

solutions with requirements and standards, and also

technical solutions they have chosen for their projects.

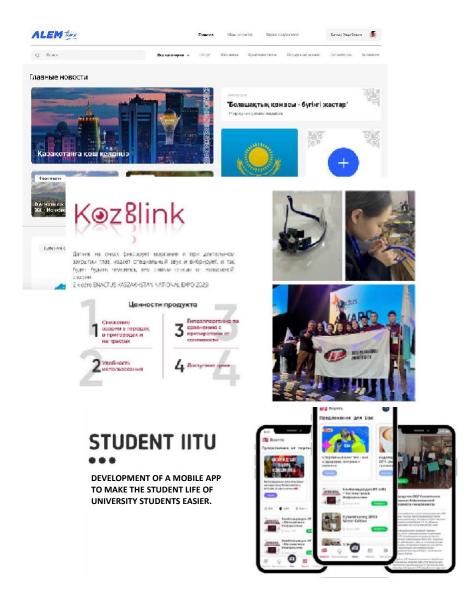
IITU Innovation mentors will guide startups to develop

opportunities to increase profits and improve business

an innovation strategy, analyze competitors, identify

- R&D LAB
- Sports programming
- INO Studio and NIC (development and training)
- Business incubator

ups to achieve success.



Innovation is the result of a team working together to combine their knowledge and experience to create something new and unique. The goal is to create an entrepreneurial ecosystem at the university, by providing practical support to ambitious enterprises and start-





- Activities within the framework of the Digital Nomads projects of the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan
- Crack IT business-case solving championship
- Incubation program and competition for start-up projects at the INO (two cohorts)
- Business incubation for agro-industry
- IT Nation 2023 Subject Olympiad
- iOS intensive
- FreshBiz Business Game
- Astana Digital Bridge 2022
- Almaty Digital Forum 2023
- Almaty TechCup 2022
- IITU Open, KBTU Open, NU Open









IITU is the leader among universities in Kazakhstan and Central Asia in ICPC. Winners and prize-winners of IITU Open, KBTU Open, NU Open local Olympiads

The IITU team qualified for the World Olympiad Final 6 times in 2013, 2014, 2019, 2020 (held in October 2021 in Moscow), 2021 (held in November 2022 in Dhaka), 2022 (will be in November 2023).







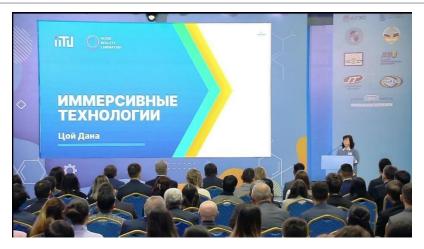


In November 2022, the World Olympiad Final in Sports Programming ICPC World Finals 2023 was held in Dhaka, Bangladesh. At the finals our country was represented by two of the strongest student teams. IITU 1 team of IITU, consisting of Sardarbekov Batyr, Baimukanov Abay and Kyzyrkanov Parasat, entered the top 20 teams, having solved 7 problems out of 12, took 16th place among more than 120 best teams of world top universities.









Mixed Reality Laboratory



Apple new laboratory

#### Digital transformation, improvement of the university's management model and personnel policy

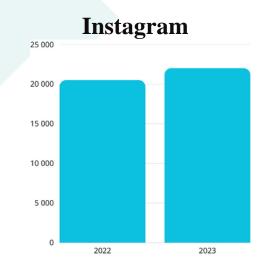
#### Problems:

- Insufficient digital resources for training and administrative work.
- Lack of involvement of employees and faculty members in the university digitalization process
- Lack of qualified teachers in certain specialties.

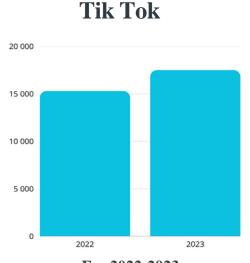
#### Objectives:

- Implementation of a modern IT infrastructure that ensures effective interaction between all structural divisions of the university.
- Development of an eco-system of startup projects: creating conditions for commercialization of the results of innovative activities, attracting investments.
- Improvement of digital educational resources, platforms and tools for the educational process.
- Creation of a platform for interaction with industry, scientific and educational institutions to exchange experiences and resources.





For 2022-2023: Coverage increased by 15% over the year

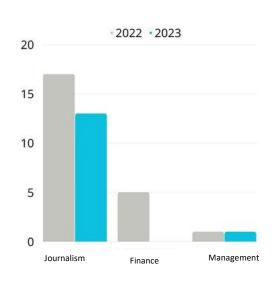


For 2022-2023: Tik Tok coverage increased by 70%

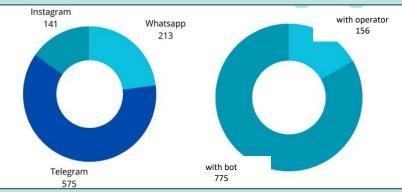
# A comparative analysis was carried out among those enrolled

**Objective for 2023-2024:** 

increase the number of students enrolled in "Journalism and Reporting", "Management and Governance", "Finance, Economics, Banking and Insurance"

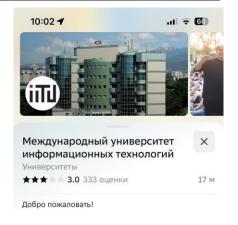


# Have developed and implemented whatsapp, telegram and instagram chat bots that can automatically answer more than 30 questions of present interest.



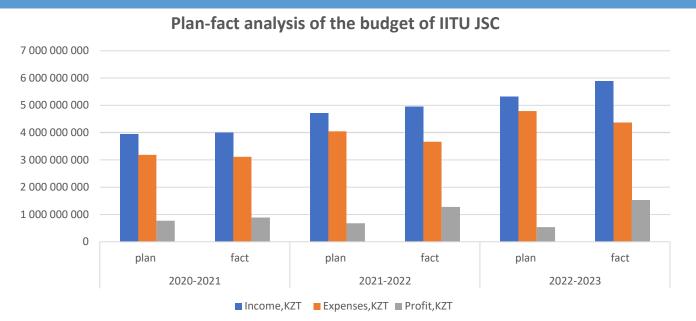
# Plan for 2023-2024: increase coverage by adding relevant answers to questions





Over the course of six months, the rating of personal account on the 2GIS platform was increased from 2 to 3 points.

#### Financial and economic model of university sustainable development



## **Problems:**

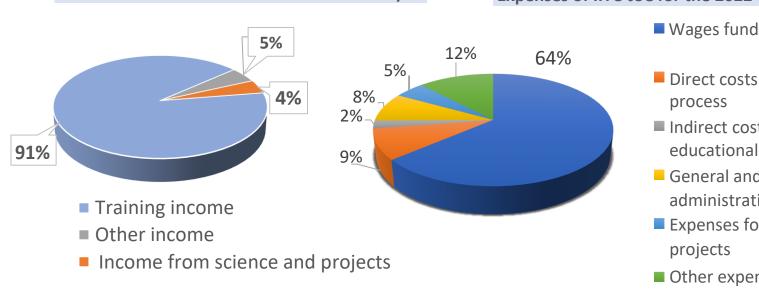
- Unprofitability of EP master's and doctoral programs;
- Low profitability for additional services and funded projects;

## **Objectives:**

- **Development of endowment fund;**
- Increasing the number of additional services and their profitability;
- Increase in the number of research projects

#### Income of IITU JSC for the 2022-2023 academic year

#### Expenses of IITU JSC for the 2022-2023 academic year



- Direct costs for the educational process
- Indirect costs for the educational process
- General and administrative expenses
- Expenses for science and projects
- Other expenses

EP	profita	ability,	%

EP name	ВА	MA	PhD
Journalism	11,49		
Information Security	21,02		
Business and Administration	22,77	-142,39	
Information Technologies	25,05	-208,50	-0,98
Communications and Communication Technologies	21,02	-133,91	

# University objectives for the 2023-2024 academic year:



In order to implement the Development Strategy of IITU JSC for 2022-2025:

- Successful completion of the International Institutional Reaccreditation procedure with confirmation of the quality of activities of IITU JSC;
- Analysis of the educational outcomes of university educational programs and the policy of assessing students' knowledge;
- Development and implementation of microqualification programs and ensuring collaboration with large companies;
- Development of online education, development of high-quality proprietary MOOCs, provision of additional educational services and attraction of external potential students;
- Search for potential partners and implementation of educational programs within the framework of double-degree education as the most important means of increasing the competitiveness of a university in the global market of educational services;
- Ensuring participation in the QS Stars program and other significant world and national ratings;
- Preparation of the material and technical base and attraction of scientific and pedagogical personnel to create a scientific school in the direction of "Artificial Intelligence";
- Development of scientific and professional competencies of faculty members for conducting high-quality scientific research and successful defense of PhD dissertations;
- Development of an eco-system of startup projects: creating conditions for commercialization of the results of innovative activities, attracting investments;
- Organizing meetings of students with eminent graduates and top managers of large employers in collaboration with the Alumni Association;
- Introduction of Integral GPA in order to increase students' activity in social, patriotic, cultural and sports events of the university and the city;
- Intensifying work to support socially vulnerable students and people with disabilities.



# THANK YOU FOR YOUR ATTENTION!

UNIVERSITY PROGRESS REPORT FOR 2021-2022 ACADEMIC YEAR