



## DEAR APPLICANTS!

Founded in 1934, Kazakhstan's first physical-mathematical faculty of Kazakh State University became the cradle of education and one of the national centers of education and science. This historic mission is relevant to the faculty even now. The faculty has overcome all the trials and remains one of the leading centers for research and training in mathematics, mechanics and information technology in the country.

The faculty is constantly developing. In recent years there has been a steady growth in students' number. An increasing number of research programs, creation of new courses in the most important areas of training, material resources of the faculty are being expanded. Students receive a fundamental education and immerse in the research on the selected areas of modern mathematics, mechanics and informatics.

Achievements of the faculty today became possible thanks to the enthusiasm and creativity of several generations of scientists who worked and are working today at the faculty. Stages of the development of mathematics and mechanics as a science in Kazakhstan are associated with the names of many scientists who left a notable mark in the history of the faculty. The reality of the modern world is that we also have to keep abreast of the time and continue to improve the learning process of our faculty. The acquired fundamental knowledge allows graduates of KazNU Mechanics and Mathematics Faculty to learn new skills and abilities in a timely and qualitative way, therefore they are always in demand on the labor market of our country.

A team of mechanics and mathematics faculty has huge plans to improve the learning process and further improve the efficiency of scientific research in accordance with the requirements of the time. The faculty has the potential to successfully implement our plans. We believe that the first Mechanics and Mathematics Department in Kazakhstan will hold high the banner of its leadership and forever remain the first at the frontiers of science and education - in the hearts of students, alumni, faculty and staff.

We are always glad to see at our faculty motivated, active and ambitious young people, who are aimed at getting a better education, open to new knowledge and full dialogue. We believe that the scientific and practical achievements of the faculty will find their actual implementation in you, our future students, and excellent career prospects will be open to the graduates of the Faculty of Mechanics and Mathematics at Al-Farabi Kazakh National University.



**ZHAKEBAYEV D.B.**  
DEAN OF MECHANICS  
AND MATHEMATICS FACULTY,  
Dr. Ph.D., PROFESSOR



## OUR GRADUATES ARE OUR PRIDE



**Bakytzhan Zhumagulov** – Deputy of the Senate of the Parliament of the Republic of Kazakhstan. Graduate of 1979.



**Almasadam Satkaliyev** – Chairman of the Management Board of JSC National Welfare Fund "Samruk-Kazyna". Graduate of 1992.



**Alikhan Smailov** – First Deputy Prime Minister of the Republic of Kazakhstan – Minister of Finance of the Republic of Kazakhstan. Graduate of 1994.



**Kuanyshbek Yessekeyev** – Chairman of the Management Board of "Kazakhtelecom" JSC. Graduate of 1995.



**Assylbek Kozhakhmetov** – the president of Almaty Management University. Graduate of 1980.



**Maktagali Bektemessov** – First Vice-rector of Abay Kazakh National pedagogical university. Graduate of 1985.



**Maksat Kalimoldaev** – Honorary director of the Institute of Information and Computing Technologies, Academician of the National Academy of Sciences of the Republic of Kazakhstan. Graduate of 1980.



**Amandyk Tuleshov** – General manager of the Institute of Mechanics and Machine Science named after Academician U. A. Dzholdasbekov. Graduate of 1984.



**Darkhan Ahmed-Zaki** – Rector of Astana IT University. Graduate of 2002



**Aibek Kuatbayev** – CEO of Bugin Holding. Graduate of 2014.



## GRADUATES OF OUR FACULTY CAN WORK ...

Graduates of the Department of **"Mathematics"** can work in research, educational, insurance/financial institutions, IT companies, general education institutions and colleges, universities, in public administration, economics and business.

Undergraduate graduates of the Department of **"Mathematics"** may work as junior research assistants, analysts, and teaching assistants.

Graduates of the Master's degree program in the Department of **"Mathematics"** can work as research assistants, teachers of the first category, senior analysts, programmers, teachers.

Graduates of the Department of **"Mechanics"** can work in research, educational, research and production facilities, IT-companies.

Undergraduate graduates of the Department of **"Mechanics"** can work as junior researchers, analysts, mechanical engineers, programmers, teaching assistants.

Graduates of the Department of **"Mechanics"** graduate can work as research assistants, teachers of the first category, senior analysts, leading mechanical engineers, and teachers.

Graduates of the department **"Mathematical and Computer Modeling"** can work in research, educational, scientific-production and manufacturing institutions, IT-companies, institutions of telecommunications.

Bachelor's degree graduates of the department of **"Mathematical and Computer Modeling"** can work as junior researchers, analysts, technicians, programmers, engineering technicians, teaching assistants.

Graduates of the Department of **"Mathematical and Computer Modeling"** can work as research assistants, teachers of the first category, senior analysts, lead engineers, senior technician-technicians, teachers.

Graduates of the department of **"Computational Sciences and Statistics"** can work in professional fields such as; science and research, education and communication, manufacturing and engineering, computer science and software, finance and economics. The objects of the master's professional activity are: research institutions, educational organizations, insurance organizations, financial institutions, business, economics, IT companies, production.

All educational programs of the 2021 enrollment contain a special **MINOR** program, which provides, on a fee basis, mastering of additional types of training. This will allow our graduates to teach mathematics, physics, computer science, and ICT in secondary and post-secondary institutions.



## EDUCATIONAL PROGRAMS OF THE DEPARTMENT

### BACCALAUREATE

Education in all specialties of the Faculty of Mechanics and Mathematics is available in Kazakh, Russian or English, depending on the language of instruction chosen by the doctoral student.

#### **6B054 Mathematics and Statistics:**

##### **Group of educational programs: "Mathematics and Statistics»**

- Mathematics
- Mathematics (NES)
- Actuarial Mathematics
- Computational sciences and statistics

##### **Group of educational programs: " Mechanics»**

- Mechanics

#### **6B061 Information and communication technology:**

##### **Group of educational programs: "Information Technologies»**

- Mathematical and computer modeling

#### **6B071 Engineering and civil engineering:**

##### **Group of educational programs: "Air Transportation and Technology»**

- Space Engineering and Technology

##### **Group of educational programs: "Electrical Engineering and Automation»**

- Robotics systems



## MASTER'S DEGREE PROGRAM

Education in all specialties of the Faculty of Mechanics and Mathematics is available in Kazakh, Russian or English, depending on the language of instruction chosen by the doctoral student.

### **7M054 Mathematics and Statistics:**

#### **Group of educational programs: "Mathematics and Statistics»**

Mathematics

Mathematics (URSA, France) - *double degree program with the University of Reims Champagne-Ardenne, France*

Actuarial Mathematics

Applied Mathematics and Control Processes

Computational Sciences and Statistics

#### **Group of educational programs: " Mechanics»**

Mechanics

Mechanics and Energy - *double-degree program with the University of Lorraine, France*

### **7M061 Information and communication technology:**

#### **Group of educational programs: "Information Technologies»**

Mathematical and computer modeling

Mathematical and computer modeling (PFUR) - *double degree program with Peoples' Friendship University of Russia, Russia*

Mathematical and computer modeling (International Greek University) - *double degree program with the International Greek University, Greece*

### **7M071 Engineering and civil engineering:**

#### **Group of educational programs: "Space engineering»**

Space Engineering and Technology

#### **Group of educational programs: "Robotics and Mechatronics»**

Robotics systems



## DOCTORATE

Education in all specialties of the Faculty of Mechanics and Mathematics is available in Kazakh, Russian or English, depending on the language of instruction chosen by the doctoral student.

### 8D054 Mathematics and Statistics:

**Group of educational programs: "Mathematics and Statistics»**

Mathematics  
Computational Sciences and Statistics

**Group of educational programs: " Mechanics»**

Mechanics

### 8D061 Information and communication technology:

**Group of educational programs: "Information Technologies»**

Mathematical and computer modeling

### 8D071 Engineering and civil engineering:

**Group of educational programs: "Space engineering»**

Space Engineering and Technology

**Group of educational programs: "Robotics and Mechatronics»**

Robotics systems



Erasmus+



# SMARTCITY

Innovative Approach Towards a Master Program on Smart Cities Technologies



GEOCLIC  
Erasmus+



## FEEDBACK ABOUT OUR FACULTY

While I was still at school I decided for myself that I would definitely study at the Faculty of Mechanics and Mathematics at Al-Farabi Kazakh National University, because this faculty is rightly considered the best mechanics and mathematics faculty in the country.

To learn about this surprising faculty helped me reviews of its graduates, students and teachers and the site of university allowed to get all the information I needed.

One more big, I would even say huge, plus of the Faculty of Mechanics and Mathematics is that the specialists graduated by this faculty, are widely demanded in the labor markets. And the most talented graduates can continue their education in master and doctoral programs.

*Kylyshbay Alua,  
1st year master's student of the specialty  
"Mathematical and computer modeling".*



All countries know that the people of Afghanistan are victims of war. For the past 40 years, we have continued to suffer from these tragic events of our history. In Afghanistan, there is only a bachelor's degree in fields of science such as mathematics, physics, chemistry, etc. I didn't have the opportunity to get a master's degree in mathematics in Afghanistan. So in 2014, I entered the Faculty of Mechanics and Mathematics at Al-Farabi Kazakh National University and already in 2016, I received a master's degree. The main factor in choosing an educational institution is a very high level of knowledge in the field of mathematical sciences received by students of the Faculty of Mechanics and Mathematics at Al-Farabi Kazakh National University. In general it is worth noting the scientific level of Kazakh universities, especially Al-Farabi Kazakh National University. My stories about the Faculty of Mechanics and Mathematics and KazNU inspire and motivate my colleagues from Afghanistan. I am now enrolled in a doctoral program under a bilateral contract. And I thank the people and government of Kazakhstan, who are working to build capacity in neighboring countries, especially Afghanistan. Afghanistan.

*Aimal Rasa Ghulam Hazrat,  
a 3rd year doctoral student majoring in mathematics.*







## STUDENTS' LIFE



Dedication of students



Freshman Talent Competition



Cup of the "Sunkar"  
Smart Student Project



Meeting the famous people



Dean's Cup



Welcome to the NSO



## FOREIGN INTERNSHIPS



University of Lorraine, France



Erasmus + programme



Berlin Technical University, Germany



National University  
of Technology Kolkata, India



Samara State Aerospace University  
named after Academician  
S.P. Korolev, Russia



AGH University  
of Science and Technology, Poland



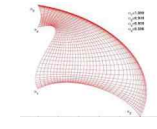
SCIENTIFIC DIRECTIONS



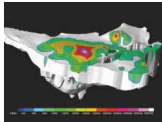
Laboratory of "Algebra and Logic»



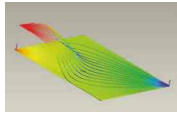
RESEARCH INSTITUTE OF MATHEMATICS AND MECHANICS



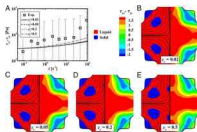
Laboratory of "Differential Equations and Control Theories»



Laboratory of "Computational Mathematics and Mathematical Modeling»



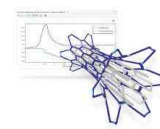
Laboratory of "Mechanics of Liquid, Gas, Plasma and Energy»



Solid Mechanics Laboratory



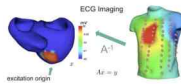
Space technology laboratory



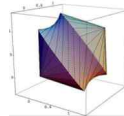
Laboratory of Mechanics of Materials and Processes



Center for Robotic Systems, Mechanism and Machine Theory



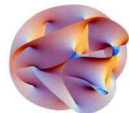
Laboratory of "Inverse problems»



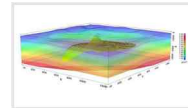
Laboratory of Mathematical and Functional Analysis



Laboratory of Theoretical and Celestial Mechanics



Laboratory of Equations of Mathematical Physics



Laboratory Computational Technologies and Problems in the Oil and Gas Industry



"Computational Mathematics and Mathematical Modeling" laboratory



Laboratory of Actuarial Mathematics



Computational Science Laboratory



**AL-FARABI KAZAKH NATIONAL UNIVERSITY**  
Faculty of Mechanics and Mathematics

**FOREIGN ACADEMIC PARTNERS**



**KAZAKHSTAN ACADEMIC PARTNERS**



**INDUSTRIAL PARTNERS**

