

AI FARABI KAZAKH NATIONAL UNIVERSITY

Al-Farabi Kazakh National University overview, research and educational activities

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> > mary, Kazaknsta

PEEX Online Meeting/ Seminar at the ACCC Impact Week (April 2024)

GLOBAL COMPETITIVENESS OF KAZNU

INTERNATIONAL RANKINGS



QS WORLD UNIVERSITY RANKINGS – 150TH PLACE



QS ASIA UNIVERSITY RANKINGS 2023: Central Asia – 1ST PLACE QS ASIA UNIVERSITY RANKINGS – 44TH PLACE MARK OF EXCELLENCE - 5 QS STARS EMERGING EUROPE & CENTRAL ASIA - 16TH PLACE

QS GRADUATE EMPLOYABILITY RANKINGS # 201-250 PLACES

GRADUATE EMPLOYABILITY RANKINGS

STARS

UNIVERSITY

WORLD UNIVERSITY RANKINGS by subject

16 FIELDS OF STUDY ARE IN THE TOP



ACADEMIC RANKING EUROPIAN STANDART «AA+»



THE EMERGING ECONOMIES RANKINGS # 351-400 PLACES



ASIA UNIVERSITY RANKINGS # 401-500 PLACES



ART & HUMANITIES # 401-500 PLACES BUSINESS & ECONOMICS # 601-800 PLACES COMPUTER SCIENCE # 601-800 PLACES SOCIAL SCIENCE # 801+ PLACES PHYSICAL SCIENCES # 801-1000 PLACES ENGINEERING TECHNOLOGY # 801-1000 PLACES



Al-Farabi Kazakh National University

The QS Intelligence Unit has, through rigorous and independent data collection and analysis of performance metrics as set out in the QS Stars" methodology, rated AL-FARABI KAZAKH NATIONAL UNIVERSITY as a Five Stars institution.







STRUCTURE OF THE UNIVERSITY: 2023-2024



Academical personal - 3331

Number of students - 26081



FACULTY OF GEOGRAPHY AND ENVIRONMENTAL SCIENCES

The Faculty of Geography and Environmental sciences of Al-Farabi Kazakh National University was opened in 1948.





Departments:

- Geography, Land Management and Cadaster
- Cartography and Geoinformatics
- Meteorology and Hydrology
- Recreational Geography and Tourism
- >UNESCO Chair on Sustainable development





UNESCO Chair for Sustainable Development al-Farabi Kazakh National University

EDUCATIONAL PROGRAMS-49

BA - 13

- 6B05205 Geography
- 6B07303 Land management
- 6B07304 Cadaster
- 6B05203 Hydrology
- 6B05204 Meteorology
- 6B07301 Geodesy and cartography
- 6B07302 Geoinformatics
- 6B05206 Natural and technogenic risks
- 6B11101 Tourism
- 6B11103 Restaurant business and hotel business
- 6B05202 Ecology
- 6B11201 Life safety and environmental protection
- 6B11202 Environmental Engineering

MSc - 23

- 7M01505 Geography
- 7M05203 Geography
- 7M07304 Land management
- 7M07305 Cadaster
- 7M05204 Geospatial Environmental Management
- 7M05205 Geography (URFU)
- 7M05206 Hydrology
- 7M05207 Meteorology
- 7M05209 Geoecology and environmental management
- 7M05210 Natural and technogenic risks
- 7M05211 Ecology
- 7M05213 Ecology and nature management (BelSU)
- 7M05216 Ecological soil science
- 7M11201 Life safety and environmental protection
- 7M07301 Geodesy
- 7M07302 Geoinformatics
- 7M07303 Cartography
- 7M07307 Big Data in Geodesy
- 7M11101 Tourism
- 7M11102 Tourism (RUDN)
- 7M11103 Tourism (BelSU)
- 7M11104 Restaurant business and hotel business
- 7M11106 Management of hotel and restaurant business (BelSU)

PhD - 13

- 8D01503 Geography
- 8D05202 Geography
- 8D05203 Hydrology
- 8D05204 Meteorology
- 8D07303 Cartography
- 8D05206 Natural and technogenic risks
- 8D05207 Ecology
- 8D07301 Geodesy
- 8D07302 Geoinformatics
- 8D07304 Land management
- 8D07305 Cadaster
- 8D11101 Tourism
- 8D11102 Tourism and hospitality

RESEARCH AND INNOVATION ACTIVITIES

Research and innovation activities are carried out in the following key areas:

Regional climatic changes and their consequences, assessment of the vulnerability of natural and anthropogenic systems in the context of adaptation to climate change

Patterns of formation and dynamics of natural hazards for early warnings, risk management

Patterns of development of ecological and geomorphological processes on the territory of Kazakhstan and their mapping

GIS and remote sensing in environmental management, advanced research and innovation in the agro-industrial complex

Socio-geographical problems of the territorial organization of the population of the Republic of Kazakhstan

Recreational Geography and Tourism

CURRENT RESEARCH

Research programs

- ¹ Scientific and applied rationale for managing the natural and agricultural system to prevent desertification processes in the southern regions of Kazakhstan, to ensure sustainable development of rural areas
- ² Sustainable development of natural-industrial and socio-economic systems of the West Kazakhstan region in the context of green growth: a comprehensive analysis, concept, forecast estimates and scenarios

Scientific and technical projects

- ³ Monitoring and management of pasture lands of the Moyynkum sand massif under climate change conditions using remote sensing data
- 4 Geospatial approach to assessing the risks of climate disasters (drought and erosion) and their impact on agriculture in the Western region of Kazakhstan
- ⁵ Comprehensive geographical assessment of sustainable development of large cities of the Republic of Kazakhstan

6 Rational use of natural tourism and recreational resources of the Republic of Kazakhstan based on assessment of recreational capacity and minimization of anthropogenic impact

CURRENT RESEARCH

Sci	entific and technical projects (continuation)		
8	Development of a methodology for assessing the impact of income inequality on the level of use of medical services		
9	Monitoring of land degradation and desertification processes in the Talas district of the Zhambyl region using GIS and remote sensing data for sustainable land use		
10	Development of a modified methodology for assessing spatial growth factors and overcoming differences between regions		
Gra	ants for young scientists		
11	Cartographic modeling and forecasting of productivity of pastures in Central Kazakhstan based on remote sensing data for the sustainable development of livestock farming		
12	Territorial analysis of the Semipalatinsk test site for the creation of an adaptive landscape farming system		
"Zł	has Galym" projects for Postdoctoral studies		
13	Agroecological zoning and assessment of the current state of pastures in Central Kazakhstan using GIS and remote sensing data		
14	Assessment of the impact of climate change on the water resources of the Ile-Balkhash basin		

https://farabi.university/science/scientific-research-activity?&active tab order=6



SCIENTIFIC CENTERS and laboratories

Nº	Center name	Name of advanced training courses
1	Center for Geographical	
	Research and Additional	methods for the course: Geography. Advanced level).
	Professional Education	2) GIS and geoinformatics.
	(2017)	3) Actual problems in geography.
		4) Preparing schoolchildren for the Unified National Test
		in Geography.
		5) Preparing schoolchildren for Olympiads in geography.
2	Center for Digital	Conducting geodetic works.
	Cartography and Applied	
	Geodesy (2016)	
3	COMSATS Center for	ANSO-BIDI School for Innovation and Entrepreneurship,
	Climate and Resilience	Sustainable Development and Leadership Enhancement.
	(2018)	Organizers: COMSATS, ANSO, Center for Environmental
		Economics of the University of the Chinese Academy of
		Sciences (CEE-UCAS)
4	Hospitality Center (2016)	1)Training courses for qualified guides on the basis of Al-
		Farabi KazNU to serve tourist groups
		2)Travel agent
		3)Advanced training courses for tour guides
		4)Determination of hydromorphometric characteristics of
		a water body on the example of a moraine lake and
		compilation of cartographic material (plans of moraine
		lakes)

- 1. Laboratory of demographic problems and quality of life
- 2. Environmental monitoring laboratory
- 3. Laboratory for research of soil-ecological processes in the geosphere
- 4. Environmental safety laboratory
- 5. Laboratory of labor protection and industrial sanitation
- 6. Laboratory of Geodesy, photogrammetry and digital cartography
- 7. Meteorological center
- 8. Laboratory of Climate Change
- 9. Laboratory "E-Tourism"
- 10. Laboratory of Engineering Arrangement of the Territory
- 11. Laboratory of Soil Science GIS and Remote Sensing
- Laboratory Kazakhstan-China joint laboratory "Remote Sensing Technology and Applications"



Sustainable development of natural-industrial and socio-economic systems of the West Kazakhstan region in the context of green growth: a comprehensive analysis, concept, forecast estimates and scenarios

The goal of the program is to conduct comprehensive research to ensure sustainable development (SD) of natural and socio-economic systems of the West Kazakhstan region (Mangistau, Atyrau, West Kazakhstan and Aktobe regions) in the context of green growth.







Tasks within the framework of the Program are to assess:

- 1. natural resource potential of the region;
- 2. biodiversity of the region;
- 3. air quality of the region;
- 4. soil contamination of the region with toxic chemicals;
- 5. ecological state of surface and groundwater in the region;
- 6. landscape and ecological state of the region;
- 7. socio-economic development of the region;
- 8. Develop scientific and applied foundations for ensuring the sustainability of natural and economic systems and socio-economic development.



COMSATS CENTRE FOR CLIMATE AND SUSTAINABILITY (CCCS)



https://farabi.university/science/nii/4

https://farabi.university/science/nii/41

COMSATS Centre for Climate & Sustainability is be a multistakeholder institute working in the framework of South-South & Triangular Cooperation to bring innovative approaches to plan, fund and tackle climate change challenges in line with the policy and practices of developing countries and their international obligations.



- enhance scientific knowledge on climate change for appropriate climate action and advocacy;
- assess impacts of environmental and climatic variability on livelihoods and economic development;
- combat climate change through mitigation and adaptation for sustainable growth and development;
- improve societal knowledge and capacity building on climate change and environmental issues;
- develop knowledge bank of information and data to inform better evidence-based policy making;

• promote regional and global partnerships to take effective action for climate and sustainability



THE INTERNATIONAL COOPERATION

International cooperation at the faculty is aimed at :

- stimulation of mutually beneficial cooperation;
- exchange of students, graduate students and employees for collaborative work
- organization of professional development training courses;
- development and implementation of joint educational programs, including those providing for the issuance of double diplomas;
 - organizing academic meetings and conferences;
- joint research activities;
- publication of scientific papers; exchange of scientific information;
- attraction of leading scientists for the scientific supervision of PhD students.









THE INTERNATIONAL COOPERATION









Joint research

- Sino-Kazakhstan Joint Laboratory for Remote Sensing Technology and Applications -2024
- Application research project "Joint development and application demonstration of typical natural resource element remote sensing monitoring technology in Center Asia"
- Central Asian Regional Action Plan for the Development of Green Technologies







Academic mobility of students

- Within the framework of the program of the Ministry of Science and Higher Education of the Republic of Kazakhstan;
- Erasmus+ (Inholland University of Applied Sciences, the Netherlands, University of Salzburg Salzburg, Austria);
- Interuniversity agreement.

Research internships for MSc and PhD students

- Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
- Polytechnic University of Valencia;
- Bosphorus University;
- Yildiz Technical University;
- BILIM University of Antalya;
- Russian Hydrometeorological University and etc.

Invited foreign professors

- Within the framework of the program of the Ministry of Science and Higher Education of the Republic of Kazakhstan
- Foreign professor on staff
- Guest lecture
- > As part of the Fulbright Research Fellowship Program



All educational programs of the faculty have been internationally accredited (**ASIIN e.v., FIBAA, ACUINUS, KazSEE)**, and they also occupy leadership positions annually among higher educational institutions of the Republic of Kazakhstan in the national ranking of the National Accreditation Center of the Ministry of Education and Science of the Republic of Kazakhstan (Independent Agency for Quality Assurance in Education, IAAR, Atameken, etc.)



Al-Farabi KazNU has received confirmation from the World Tourism Organization (**UNWTO**) on the conformity of the quality of undergraduate and graduate educational programs for the Tourism program to the international level (passed the **UNWTO.TedQual** international certification).













Thank you for your attention!

Faculty of Geography and Environmental Sciences

https://farabi.university/faculty/5?lang=en



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We invite you to cooperation!