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KSMU

Kyrgyz State University of Geology, Mining and Natural Resources Development n.a academic U. Asanaliev



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Kyrgyz Republic is the unique region from the geological point of view. All the chemical elements of Mendeleev's Periodic Table were found in the territory of our Republic. 15 000 deposits and occurrences of minerals resources are discovered . Only gold deposits are more then 1000. Mineral resource potential of the territory of our Republic is very large.



The first and only Institution who prepares specialists for Geological, Metallurgical and Mining industry

Today the mining industry is recognized by Government as one of the priority field in economic development of our country.



History

- ▶ University was established on July 31, 2019
- ▶ but Our University dates back to 1954 as a Faculty of the Frunze Polytechnic Institute.

We prepare specialists for all stages of mineral resources development:

- ▶ **Geological Engineers** whose task is: discovery, exploration and preparation for exploitation of mineral deposits.
- ▶ **Geodesy Engineers:** specialist in carrying out spatial-geometric measurements during mining and geological exploration.
- ▶ **Mining Engineers** who provides underground and open-pit mining operations
- ▶ **Metallurgical Engineers** who receives pure metal by enriching and metallurgical process
- ▶ **Environmental Engineers** who protects the state of environment during the mining activities
- ▶ **Engineer-Economists** engaged in Mining economies and Mining Management
- ▶ **Software engineers** who provide information support for mining

KSMU today

- ▶ Number of students – 2319
- ▶ Number of teaching staff–179

We have Students from Russia, Kazakhstan, Uzbekistan, China, Pakistan, Republic of Korea and other countries.

The university has licenses for educational activities in:

- ▶ 14 directions of bachelor and specialist degree,
- ▶ 8 directions of Masters.
- ▶ 22 Postgraduate (Aspirantura) Programs

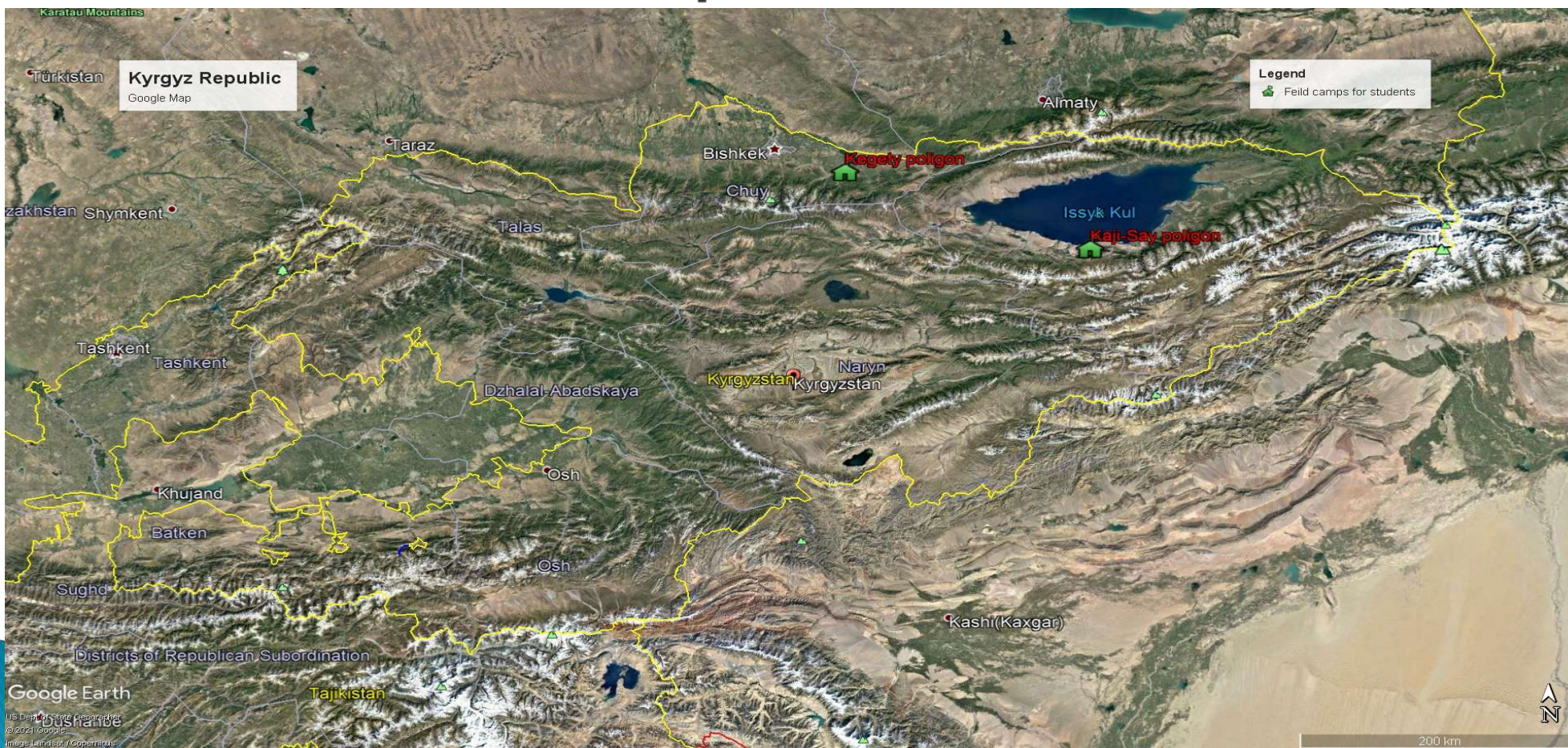
The qualification of the teaching staff is a key link in the quality of education. Total number of teaching staff is 179 people, including 4 academicians of NAS KR, 18 doctors of sciences, 71 candidates of sciences.



University has:

- ▶ Center for designing mining processes
MICROMINE software
- ▶ 5 Computer classes
- ▶ Field camps for students in Kegety and
Kadjy–Say near to Issyk–Kul Lake
- ▶ Largest Geological Museum in Central Asia
- ▶ Four academic buildings with 20 laboratories
- ▶ Two technical parks

Field camps for students



Geology Museum

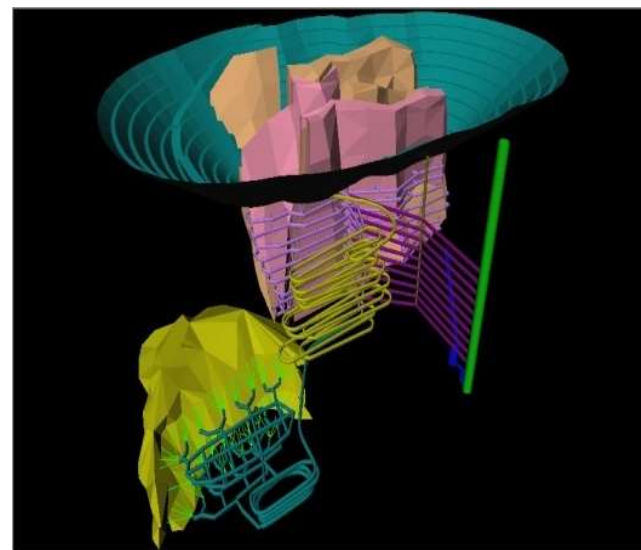
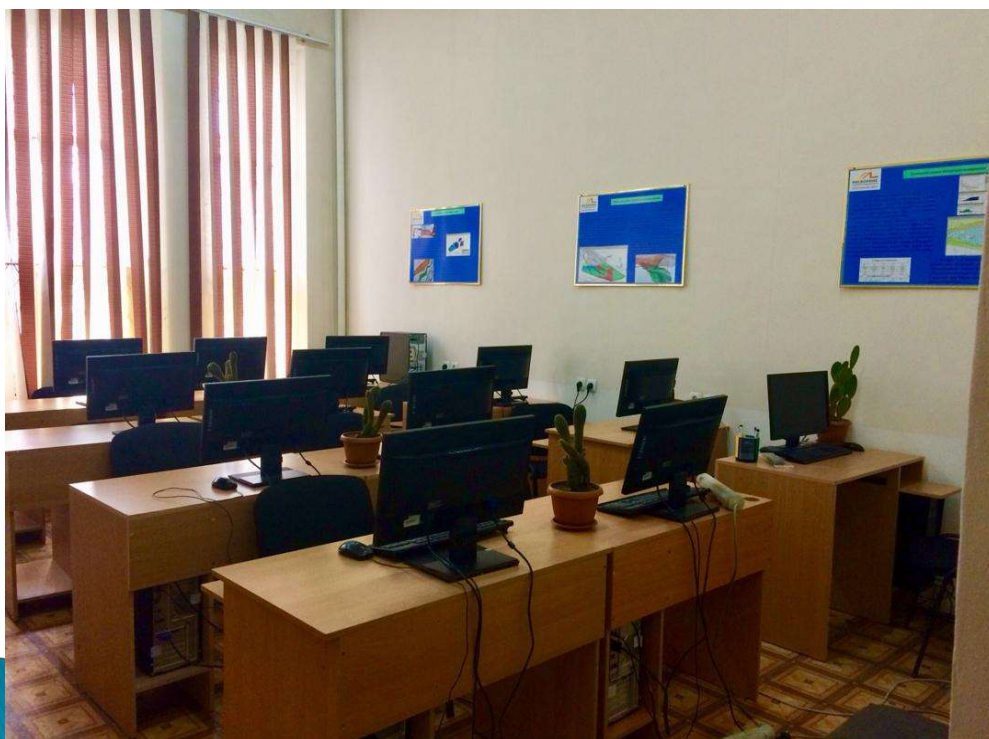
- ▶ The Geological Museum was founded in 1962 on the basis of the geological faculty at FPU.
- ▶ The museum exhibits 6 580 mineral and rock samples from all over the Kyrgyz Republic and from many other countries.



Computer classes



Center for designing mining processes MICROMINE software





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KSMU carries out educational activities in 22 educational programs:

- ❖ Bachelor: **9** directions;
- ❖ Specialist: **12** directions;
- ❖ Master studies – **8** directions;
- ❖ Post graduate-Aspirantura - **22** directions;
- ❖ Additional education programs - **8** directions.





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Independent **accreditation**
of higher professional education programs of the
KSMU
date of external evaluation June 15-16, 2020

Based on the decision of the expert council of the **Agency for the Accreditation of Educational Programs**, the accreditation of higher professional education programs was **successfully carried out** at KMSU.





KSMU project team



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Dr. Akylbek Maralbaev
Prof., Mineral Resources Geology Department
Rector of the KSMU



Dr. Keldibek Orozov
Docent, Mining Electromechanics
Department



Zulfia Jumasheva
Head of the Master and
Post Graduate Studies Department



Dr. Talantbek Umarov
Docent of the Geodesy and Markscheider
Mining survey Department



Meiman Kasymov
Head of the Hydrogeology, Engineering
Geology, Oil and Gas Department



Bekbolot Attokurov
Vice Rector for Development and
International Relations of KSMU



Urmat Kazatov
Senior Lecturer of the Open Pit
Mining and Blasting Department



Bernmet Maatkerimova
Lecturer of the Mineral Resources
Geology Department

Master programs

	Code	Master	Total
1	630400	Oil and Gas Engineering	6
2	640200	Power Engineering and Electrical Engineering	8
3	650200	Metallurgy	11
4	630100	Applied Geology	-
5	760300	Technosphere Safety	11
6	650400	Technological machines and equipment	4
7	710100	Informatics and Computer Engineering	-
8	710200	Information Systems and Technologies	8
Total:			48

Post graduate- Aspirantura programs

Post graduate-Aspirantura	Code	Total
Condensed matter physics	01.04.07	1
Mining machines	05.05.06	1
Mathematical and software support for computers, complexes and computer networks	05.13.11	1
Metallurgy of ferrous, non-ferrous and rare metals	05.16.02	2
Economy and management of the national economy (by industries and spheres of activity)	08.00.05	2
Hydrogeology	25.00.07	3
Engineering geology, permafrost and soil science	25.00.08	5
Geophysics, geophysical methods of prospecting for minerals	25.00.10	1
Geology, prospecting and exploration of solid minerals minerageny	25.00.11	3
Geology, prospecting and exploration of oil and gas	25.00.12	
Mineral processing	25.00.13	1
Mining and oil and gas geology, geophysics, mine surveying and subsoil geometry	25.00.16	6
Geomechanics, rock destruction, mine aerogasdynamics and mining thermal physics	25.00. 20	5
Geotechnology (underground, surface and construction)	25.00.22	2
Geoecology (by industry)	25.00.36	2
Total number of students		35



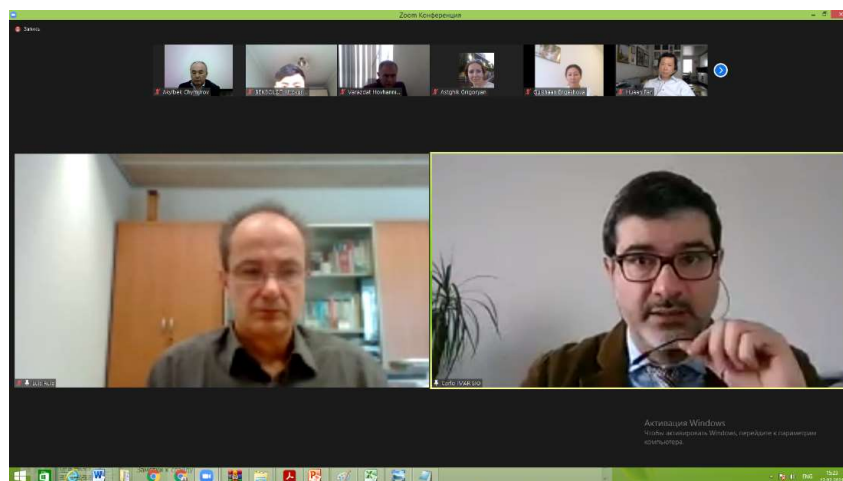
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WP-5 Project Management Kick of Meeting

10-12 февраля состоялся стартовая встреча проекта “Развитие междисциплинарных программ последипломного образования и укрепление исследовательских сетей в области геоинформационных технологий в Армении и Кыргызстане” (GeoTAK), финансируемого в рамках программы Европейского Союза ЭРАЗМУС+ в 2021-2024 гг.

WP-5 Project Management Kick of Meeting



WP-3 Research Capacities

Discussion of new curricula development needs at KSMU



WP-3 Research Capacities Scientific Council of KSMU approved the opening of a new PhD program





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WP-3 Research Capacities New programs to develop

Master	
630400	Mining
PhD	
630100	Applied Geology
630400	Mining

WP-3 Research Capacities Existing programs to improve

Master	
630100	Applied Geology
630400	Oil and Gas Engineering
760300	Technosphere Safety

WP-3 Research Capacities

List of courses we want to integrate to postgraduate programs

	Name of the discipline
1	Introduction to GIS technology
2	Specialized Geographic Information Systems
3	Applied Remote Sensing
4	Processing and interpretation of remote sensing data
5	Geoinformation and Cartographic Modeling
6	Spatial databases
7	Computer-aided design in mining
8	Computer-aided design in geology
9	Mining and geological information system for planning and data management

WP-3 Research Capacities List of Equipment

No.	Equipment model, software	Specifications	Unit cost, Euro	Quantity	Total cost, Euro
1	Desktop Personal Computer	CPU: Intel Core i5, RAM: 8GB DDR3, HDD: 1 + 1 TB, Optical Drive: DVD, HIDs: USB Optical mouse, mouse pad, USB keyboard, all necessary cables, 1 year PC warranty and 3 year parts and labor warranty on all components, Monitor: 23" Wide Screen LCD Monitor (1600x900 native resolution)	900	11	9900
2	Desktop Workstation	CPU: Intel Core i7, RAM: 16GB DDR4, SSD/HDD: 1+1 TB, Videocard: Palit Daytona GeForce GTX1050Ti Storm-X4GB GDDR5 128Bit Optical Drive: DVD, HIDs: USB Optical mouse, mouse pad, USB keyboard, all necessary cables, 1 year PC warranty and 3 year parts and labor warranty on all components, Monitor: 27" (1920x1080)	1200	2	2400
3	Interactive whiteboard with a projector	Size 78 1/2" W x 53 3/8" H x 6 1/2" D, Four-camera DVIT® (Digital Vision Touch) technology	1100	1	1100
4	Printer A3		1100	1	1100
5	Laptop Computer	CPU: Intel Core i7, RAM: 8GB DDR4, SSD: 400GB 1 year warranty, Monitor: 14" IPS FHD, WiFi, BT, Cam, DOS, Eng-Rus	1000	2	2000
6	GNSS Receiver	Positional accuracy: 1 cm, L1, L2, 220 canals, GPS, Glonass, Beidou, Galileo, RTK	3200	2	6400
7	Handed GPS		200	4	800
8	Compas	Damping time of needle : 15s Dial scale : 1° Precision of long air level : 15' ± 5' / 2mm(20°C) Precision of circle air level : 30' ± 5' / 2mm(20°C)	100	6	600
9	Drone for aerial survey	Sensor: 1" CMOS, Photo: JPEG, DNG (RAW), JPEG + DNG, Image size: 5472 x 3648, (Analog - DJI Phantom 4 Pro+ V2.0)	2464	2	4928
10	ArcGIS	Educational Academic Departmental Small Term License (up to 5 users) annual license	409	4	1636
11	Agisoft	Agisoft Metashape - Professional Edition. Educational license (rehostable node-locked)	450	1	450
Total:					31314

WP-4 Quality Control Risk management

Objective 4. To train trainers from partner countries in relevant topics of GIT that have special interest for regional development of innovation and environmental protection

	UNLIKELY	POSSIBLE	PROBABLE	ALMOST CERTAIN
CRITICAL				
MAJOR				
MODERATE		Interest topics of GIT may vary from university to university and may create complexity.		Lack of English background of teachers
MINOR				



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WP6–Dissemination University website – about GeoTAK

✓ <https://ksmu.kg/2021/02/26/oficialnoe-otkrytie-proekta-erazmus-geotak/>

УНИВЕРСИТЕТ – ОБРАЗОВАНИЕ – НАУКА И МЕЖДУНАРОДНАЯ ДЕЯТЕЛЬНОСТЬ – АБИТУРИЕНТУ – СТУДЕНТУ – КОНТАКТЫ

Официальное открытие проекта ЭРАЗМУС + GeoTAK

АВТОР: MODERATOR · ОПУБЛИКОВАНО 26.02.2021 · ОБНОВЛЕНО 25.03.2021

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“Развитие междисциплинарных программ последипломного образования и укрепление исследовательских сетей в области геоинформационных технологий в Армении и Кыргызстане” (GeoTAK), 2021-2024 гг.

10-12 февраля 2021 года состоялся стартовая встреча проекта “Развитие междисциплинарных программ последипломного образования и укрепление исследовательских сетей в области геоинформационных технологий в Армении и Кыргызстане” (GeoTAK), финансируемого в рамках программы Европейского Союза ЭРАЗМУС+ в 2021-2024 гг.

Координатором проекта является Политехнический университет Валенсии, Испания. Кыргызский государственный университет геологии, горного дела и освоения природных ресурсов имени академика У.Асаналлева (КГУ) является официальным участником данного проекта совместно с Кыргызским государственным университетом строительства, транспорта и архитектуры имени Н.Псанова (КГУСТА) и Ошским технологическим университетом имени академика М.Адышева (ОшТУ). В



Thank you for attention!