

KORKYT ATA KYZYLORDA UNIVERSITY
INSTITUTE OF ENGINEERING AND TECHNOLOGY
ENGINEERING TECHNOLOGIES EDUCATIONAL PROGRAM

Director of the Institute of Engineering and Technology



APPROVED

B.B. Abzhalelov

"16" 11/09 2026

GeoQazyna Club
Work Plan for the 2026–2027 Academic Year

The work plan of the GeoQazyna Geological Club was considered at a meeting of the Engineering Technologies educational program.

Minutes No. 1 " 26 " 08 2026

Head of the educational program



N.S. Suleimenov

The work plan of the GeoQazyna Geological Club was considered and approved at a meeting of the Academic Quality Committee of the Institute of Engineering and Technology.

Minutes No. 2 " 16 " 09 2026

1. Purpose of the Club

To develop the geological and mining-industry outlook of students in the 6B07263 Geology and Exploration of Mineral Deposits and 607262 Mining educational programs; to increase their interest in the scientific study of the subsurface and in prospecting, exploring and developing mineral deposits; to create conditions for mastering modern technologies; and to develop professional competencies by combining theoretical knowledge with practical and industrial activities.

The Club's activities are aimed at the comprehensive study of industrial processes, from prospecting and exploration of mineral deposits to their opening, preparation, extraction and primary processing. Particular attention is also paid to increasing students' research activity, complying with industrial safety requirements, using the subsurface rationally and taking a responsible approach to environmental protection.

2. Objectives of the Club

1. To deepen students' theoretical knowledge in geology, mineralogy, petrography, lithology, geochemistry, hydrogeology, geophysics, mining and mineral-deposit development.
2. To form a comprehensive understanding of the relationship between the stages of prospecting, exploration, evaluation and development of mineral deposits.
3. To develop skills in conducting field geological observations, planning geological routes, describing observation points, sampling rocks and minerals, and documenting the materials obtained.
4. To improve the ability to work with geological maps, sections, stratigraphic columns, mining plans, mine-surveying drawings and other technical documentation.
5. To expand knowledge of technologies for extracting minerals by open-pit, underground and in-situ methods.
6. To introduce mine-working development, the organization of drilling and blasting operations, rock-mass condition control, and processes for preparing minerals for extraction.
7. To create conditions for mastering modern geophysical, geochemical, geoinformation, automated and digital technologies used in mineral exploration and mining.
8. To develop skills in using geographic information systems, three-dimensional geological and mining modelling software, production databases and digital monitoring tools.
9. To involve students in research projects, engineering developments, startup initiatives, subject Olympiads, scientific conferences and professional competitions.
10. To strengthen professional ties with mineral-exploration and mining enterprises, research organizations and sectoral government institutions.
11. To develop students' career orientation by organizing visits to industrial enterprises, off-site classes, educational routes and meetings with industry specialists.
12. To foster a culture of compliance with occupational, industrial, fire, electrical and radiation safety requirements.
13. To increase environmental responsibility concerning rational subsurface use, integrated development of mineral resources, reduction of industrial waste and restoration of disturbed land.

14. To improve Club members' leadership, organizational, project, research, teamwork and scientific communication skills.
15. To develop students' ability to work independently with professional literature, regulatory and technical documents, and scientific data.

3. Club Membership

The Club may include faculty and students of the 6B07263 Geology and Exploration of Mineral Deposits and 607262 Mining educational programs, specialists from industrial enterprises, representatives of scientific organizations, and students of other educational programs interested in these fields.

Club Head: Nurzhan Sultanuly Suleimenov, Head of the Engineering Technologies educational program.

Club members: first- through fourth-year students of the 6B07263 Geology and Exploration of Mineral Deposits and 607262 Mining educational programs, faculty members, and students of other educational programs interested in geology and mining.

Club activists: students who actively participate in implementing the Club work plan, organizing scientific and practical, cultural and career-guidance activities, preparing information materials and promoting the Club's activities.

Club partners: Kyzylkum LLP, Turanium LLP, Baiken-U LLP, as well as regional government institutions, research organizations and industrial enterprises in mineral prospecting, exploration, extraction and processing, subsurface use and environmental protection.

Club membership is formed at the beginning of each academic year and approved at a meeting of the relevant educational programs. Club members' activities are based on the principles of voluntary participation, responsibility, academic integrity, professional ethics, mutual cooperation and compliance with safety requirements.

4. Main Areas and Forms of Club Work

The Club's activities are aimed at ensuring continuity between mineral exploration and mining and combining theoretical knowledge with practical experience.

1. Information and Educational Work

Organization of lectures, scientific seminars, round tables, discussions, meetings with specialists, video screenings, quizzes and intellectual competitions on geology, mineral prospecting and exploration, mining, subsurface use and environmental protection.

2. Geological Training and Practical Work

Identification of minerals and rocks by macroscopic characteristics, description of geological samples, compilation of teaching collections, reading geological maps, preparing stratigraphic columns and geological sections, and preparing samples for laboratory analysis.

3. Practical Work in Mining Technologies

Determining mine-working parameters, analyzing deposit opening and preparation schemes, comparing mining systems, calculating key drilling-and-blasting indicators, and studying the operating principles of mining machinery and equipment.

4. Field and Educational Research

Organizing geological routes, studying natural and artificial outcrops, describing observation points, sampling rocks and minerals, keeping a field diary, and preparing a geological report based on collected materials.

5. Research and Project Work

Preparing student research projects, engineering calculations, scientific articles and reports in geology and mining, and participating in scientific conferences, subject Olympiads, competitions and startup projects.

6. Industrial and Career-Guidance Work

Organizing industrial visits to Kyzylkum LLP, Turanium LLP and Baiken-U LLP and becoming familiar with their geological, mine-surveying, technological and industrial safety services.

During the visits, students learn about mineral-deposit exploration, borehole drilling and documentation, reserve estimation, ore extraction, mine planning, production-process control and environmental protection measures.

7. Digital and Geoinformation Work

Processing geological and mining data digitally, using geographic information systems, compiling electronic maps, analyzing remote-sensing materials, and developing three-dimensional geological and mining-engineering models of deposits.

8. Industrial Safety Work

Conducting explanatory activities on occupational health and safety, industrial safety, accident prevention, use of personal protective equipment, safe drilling and blasting operations, and radiation safety requirements at mining enterprises.

9. Environmental Education

Conducting projects and activities on assessing the environmental impact of mineral exploration and mining, rational subsurface use, industrial-waste management, land reclamation, and protection of water and land resources.

10. Media and Information Work

Maintaining the Club's social-media page, preparing information materials and photo and video reports on activities, publishing news in geology and mining, and regularly updating the GeoQazyna News information board.

11. Volunteer and Community Work

Participating in community initiatives aimed at protecting the region's geological and natural heritage sites, providing career guidance to school students, and organizing educational activities that promote the professions of geologist and mining engineer.

12. Summarizing and Evaluating Results

Preparing interim and annual reports on Club activities, evaluating the effectiveness of activities held, systematizing Club members' scientific, creative and community achievements, rewarding active participants, and developing proposals for the next academic year.

5. Work Plan for the 2026–2027 Academic Year

No.	Month	Activity	Purpose	Responsible persons	Note/result
1	September	Organizational meeting of the GeoQazyna Club. Approval of Club membership, allocation of tasks in geology and mining, and discussion of the annual work plan.	Organize the Club's work and allocate tasks.	Club Head, Club activists	Minutes, participant list
2	September	Introductory meeting, "Geologist and Mining Engineer: Education, Experience and Professional Future." Introduction to the features of the professions, areas of professional activity and opportunities in the labour market.	Increase students' professional motivation.	Educational-program faculty, invited specialist	Photo report
3	October	Practical workshop, "Identification of Minerals and Rocks and Their Importance in Mining." Identification by macroscopic characteristics and evaluation of physical and mechanical properties.	Develop skills in working with mineralogical samples.	Course instructors, Club members	Sample catalogue
4	October	Industrial visit to Kyzylkum LLP. Introduction to geological, mine-surveying and mining-technology services and to borehole drilling, ore-reserve estimation and mineral extraction.	Learn about deposit exploration and extraction and the work of the geological service.	Club Head, enterprise representative	By agreement; safety briefing, photo report
5	November	Practicum, "Reading Geological Maps and Mining Drawings and Constructing a Geological Section." Development of skills in analyzing geological maps, sections, mining plans and mine-surveying documents.	Improve skills in analyzing cartographic materials.	Course instructor	Practical work
6	November	Industrial visit to Turanium LLP. Introduction to mineral prospecting, exploration and development technologies, geological documentation of boreholes, ore extraction and production control.	Learn the features of prospecting, exploration and borehole investigation of uranium deposits.	Club Head, enterprise representative	By agreement; compliance with safety requirements
7	December	Intellectual competition, "Secrets of the Subsurface:	Consolidate subject knowledge and	Club activists	Awards, photo report

No.	Month	Activity	Purpose	Responsible persons	Note/result
		Geology and Mining.” Assessment of students’ knowledge in geology, mineral exploration, mining technologies and industrial safety.	develop teamwork skills.		
8	January	Scientific seminar, “Modern Methods of Mineral Prospecting, Exploration and Extraction.” Study of modern advances in geological, geophysical, geochemical, geoinformation and mining technologies.	Learn about innovative geophysical, geochemical and remote-sensing methods.	Educational-program faculty	Collection of reports
9	February	Industrial visit to Baiken-U LLP. Introduction to geological exploration, borehole drilling, ore-reserve calculation, mineral extraction, process control and industrial safety systems.	Study industrial geology, borehole documentation and ore-quality control practices.	Club Head, enterprise representative	By agreement; visit report
10	February	Professional meeting, “A Step into the Profession,” with geologists and mining specialists. Study of industry experience, discussion of employer requirements for young specialists and identification of professional-development paths.	Explain employer requirements and career paths.	Club Head, partners	Interview, feedback
11	March	GeoMining Start student project competition: an idea for deposit study and development. Development and presentation of student projects on prospecting, exploration, geological modelling, opening, preparation and extraction.	Develop scientific and project thinking.	Academic supervisors, Club members	Project exhibition
12	April	Field training route: fundamentals of studying geological sites and planning mining operations. Description of natural and artificial rock outcrops, sampling, field documentation and analysis of initial technical solutions for deposit development.	Develop field geological research skills.	Educational-program faculty, Club Head	Route sheet, field diary
13	April	Round table, “Rational	Develop professional	Club members,	Resolution, photo

No.	Month	Activity	Purpose	Responsible persons	Note/result
		Subsurface Use, Mining Safety and Environmental Responsibility.” Discussion of environmental impacts, industrial safety, waste management and restoration of disturbed land.	and environmental responsibility.	invited experts	report
14	May	Final meeting of the GeoQazyna Club. Summary of geology and mining work during the academic year, discussion of the annual report, and awards for the best projects and active Club members.	Evaluate completed work and develop proposals for the next year.	Club Head, Club activists	Annual report, certificates

6. Additional Projects

- My Region's Geological and Mining Heritage photo competition. Presentation of the region's geological sites, mineral deposits and mining facilities.
- Formation of the World of Minerals and Rocks teaching collection. Development of an electronic catalogue of mineral, rock and mineral-resource samples.
- My First Geological Map project. Compilation of a teaching geological map using QGIS or other geographic information software.
- Digital Deposit Model project. Development of a simple three-dimensional model of a deposit based on geological, geophysical and mine-surveying data.
- Young Geologist and Young Mining Engineer scientific paper and report competition. Presentation of students' research and engineering projects.
- GeoMining Start student project competition. Development of project proposals for mineral-deposit prospecting, exploration, geological modelling, opening, preparation and extraction.
- Safe Mine engineering project. Identification of industrial hazards at mining enterprises and preparation of proposals for their prevention.
- Modern Technologies in Mining industrial case competition. Solving practical geological, technological, mine-surveying and safety tasks with the participation of enterprise specialists.
- Choose the Profession of Geologist and Mining Engineer career-guidance day for school students. Introduction to the professions, practical demonstrations and quizzes.
- Participation in regional, national and international student scientific conferences. Presentation of research results in geology, mineral prospecting and exploration, and mining.
- Rational Subsurface Use environmental project. Development of proposals for mining-waste management, land reclamation and reduction of industrial environmental impact.
- Joint mentoring program with industrial enterprises. Development of students' professional links with geologists, mine surveyors, mining engineers and industrial safety specialists.

7. Expected Results

As a result of the Club's activities:

- students' geological and mining-engineering literacy, professional interest and research activity will increase;
- skills will be developed in identifying minerals and rocks, reading geological maps and mining drawings, constructing geological sections and taking samples;
- students will master the relationship between the stages of prospecting, exploration, evaluation, opening, preparation and extraction of mineral deposits;
- the ability to analyze geological, geophysical, mine-surveying and mining data will develop;
- skills will be developed in using QGIS and other geographic information software and in compiling electronic maps and simple digital models;
- knowledge of open-pit, underground and in-situ mineral extraction technologies will increase;
- a practical understanding will be developed of mine-working development, organization of drilling and blasting, rock-mass condition control and production-process monitoring;
- at least 70% of Club members will participate in practical, field, scientific or industrial activities during the academic year;
- at least three industrial visits will be organized to Kyzylkum LLP, Turanium LLP and Baiken-U LLP;

- the number of research projects, engineering developments, reports and publications prepared by students will increase;
- students' teamwork, leadership, scientific communication and project-presentation skills will improve;
- stable professional ties with industrial partners will be established, and students' internship and employment opportunities will expand;
- a culture of compliance with occupational, industrial, fire and radiation safety requirements will be established;
- the principles of rational subsurface use, integrated development of natural resources and environmental protection will be reinforced;
- understanding of the importance of the professions of geologist and mining engineer in society and industry will expand.

8. Documentation

To organize Club activities systematically and record the results of completed work, the following documents are maintained:

- the Club work plan for the academic year;
- the approved list of Club members;
- minutes of Club meetings;
- activity participant registration sheets;
- programs of scientific, practical, field and career-guidance activities held;
- letters coordinating industrial visits with enterprises;
- orders of the Institute management and documents appointing responsible persons;
- registers of participant briefings on occupational, industrial, fire and radiation safety;
- route sheets for industrial visits and fieldwork;
- geological route diaries and logs for sampling and describing observation points;
- photo and video reports;
- student reports on industrial visits, field studies and practical work;
- research projects, engineering developments, reports, articles and presentations;
- diplomas, certificates, letters of appreciation and portfolios of Club members' achievements;
- feedback questionnaires from industrial partners and students;
- the GeoQazyna Club electronic achievement log;
- the annual report prepared at the end of the academic year.

Documents are systematized in paper and electronic formats and kept by the Club Head. Electronic materials are arranged by academic year, activity title and date.

9. Requirements for Organizing Industrial Visits

1. The purpose, objectives, date and number of participants of an industrial visit are agreed in advance with the management of the enterprise.
2. The visit is organized on the basis of the relevant order of the Institute Director, and responsible persons are appointed.
3. The visit program is developed jointly with the enterprise's geological, mine-surveying, mining-technology and industrial safety services.

4. The participant list, educational program, academic group, contact details and information about responsible persons are clarified in advance.
5. Before the visit, participants receive mandatory instruction on occupational, industrial, fire, electrical, transport and radiation safety requirements.
6. Participants who have completed the safety briefing sign a special registration log. A student who has not completed the briefing is not admitted to the industrial site.
7. The visit route is determined with due regard to the enterprise's hazardous production zones, sanitary requirements and restricted-access facilities.
8. In accordance with enterprise requirements, participants are provided with workwear, safety helmets, high-visibility vests, safety footwear, respirators and other necessary personal protective equipment.
9. At the industrial site, participants must strictly follow the instructions of the enterprise representative and the responsible instructor.
10. Without the enterprise's permission, it is prohibited to approach process equipment, touch operating machines and mechanisms, or deviate from the established route.
11. Photography and video recording at industrial sites are permitted only with the approval of the enterprise management.
12. When visiting uranium-mining and radiation-monitoring facilities, radiation-safety requirements, dosimetric monitoring and sanitary access procedures must be observed.
13. When organizing the visit, the roadworthiness of the vehicle transporting participants, the route, travel time and emergency communication procedure are determined in advance.
14. Participants' health status, medical contraindications and, where necessary, medical support are taken into account.
15. During the visit, students observe the work of the enterprise's geological, mine-surveying, technological and safety services and record the necessary information in a field or production diary.
16. After the visit, students prepare an individual or group report, presentation, photo report or reflective note.
17. The visit results are discussed at a Club meeting, and students' proposals and feedback from enterprise representatives are included in the final annual report.

List of Members of the GeoQazyna Geological Club

6B07263 Geology and Exploration of Mineral Deposits Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Alimkhan Nurai	GRM-23-1	4	
2	Ashimkhanov Alibi	GRM-23-1	4	
3	Bazarbek Anuarbek	GRM-23-1	4	
4	Darmenov Nurbolat	GRM-23-1	4	
5	Zhumabai Nurkeldi	GRM-23-1	4	
6	Zarlyq Nurdaulet	GRM-23-1	4	
7	Qalasbai Zhannur	GRM-23-1	4	
8	Otegenov Magzhan	GRM-23-1	4	
9	Tasbolatov Beksultan	GRM-23-1	4	
10	Tiyshtyqbaev Ernur	GRM-23-1	4	
11	Toraliev Nurbek	GRM-23-1	4	
12	Torebekov Adilbek	GRM-23-1	4	
13	Tynysbek Omar	GRM-23-1	4	

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6B07263 Geology and Exploration of Mineral Deposits Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Abdikakhar Bekzat	GRM-24-1	3	
2	Abutakhir Bauyrzhan	GRM-24-1	3	
3	Amangeldi Baqdaulet	GRM-24-1	3	
4	Amangeldi Zhanerke	GRM-24-1	3	
5	Alibekov Zharqyn	GRM-24-1	3	
6	Alisher Toqzhan	GRM-24-1	3	
7	Altaev Meiirzhan	GRM-24-1	3	
8	Bekmurat Nursultan	GRM-24-1	3	
9	Berdimurat Dosbol	GRM-24-1	3	
10	Ketebai Aqsunqar	GRM-24-1	3	
11	Qairatqyzy Zhanbota	GRM-24-1	3	
12	Qaldybai Galymzhan	GRM-24-1	3	
13	Mirzhanov Mansur	GRM-24-1	3	
14	Nagimetullin Alikhan	GRM-24-1	3	
15	Omirbek Nurlykhan	GRM-24-1	3	
16	Sultanuly Nurlykhan	GRM-24-1	3	
17	Temirbaev Arsen	GRM-24-1	3	
18	Tynys Agerke	GRM-24-1	3	
19	Khamitbekova Inzhu	GRM-24-1	3	

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6B07263 Geology and Exploration of Mineral Deposits Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Aitbaiuly Aibol	GRM-25-1	2	
2	Ali Zhanel	GRM-25-1	2	
3	Amangeldi Dias	GRM-25-1	2	
4	Akhmetzhan Arman	GRM-25-1	2	
5	Bazarbek Baqbergen	GRM-25-1	2	
6	Balgabaev Didar	GRM-25-1	2	
7	Baltabai Ramazan	GRM-25-1	2	
8	Bostan Nurmukammed	GRM-25-1	2	
9	Bulekbai Nurbek	GRM-25-1	2	
10	Zhanabergen Ainur	GRM-25-1	2	
11	Idrisova Tomiris	GRM-25-1	2	
12	Izmailov Shadiyar	GRM-25-1	2	
13	Kopzhasaruly Nurtileu	GRM-25-1	2	
14	Qairbek Rasul	GRM-25-1	2	
15	Qartanbek Sagatzhan	GRM-25-1	2	
16	Mamai Aibolat	GRM-25-1	2	
17	Orken Nurasyly	GRM-25-1	2	
18	Pirmakhan Zere	GRM-25-1	2	
19	Tauekel Nurdaulet	GRM-25-1	2	
20	Temirbek Arshat	GRM-25-1	2	
21	Khabibullaeva Saniya	GRM-25-1	2	
22	Sheriyazdanov Baqzhan	GRM-25-1	2	

List of Members of the GeoQazyna Geological Club

6B07262 Mining Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Akhanbek Sultan Beibarys	GD-23-1	4	
2	Abzhan Madiyar	GD-23-1	4	
3	Baltabai Aidaulet	GD-23-1	4	
4	Baltabai NurasyI	GD-23-1	4	
5	Zhunosov Eldos	GD-23-1	4	
6	Mukhambetqali Erkebulan	GD-23-1	4	
7	Pakuadinov Nursayst	GD-23-1	4	
8	Sagyndyq Nauryzkhan	GD-23-1	4	
9	Khalzhigitov Nurtore	GD-23-1	4	

List of Members of the GeoQazyna Geological Club

6B07262 Mining Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Aitqozha Zharqyn	GD-24-1	3	
2	Amantai Daniyal	GD-24-1	3	
3	Ayap Nurdaulet	GD-24-1	3	
4	Bazarbaev Erkebulan	GD-24-1	3	
5	Bauyrzhanuly Orazali	GD-24-1	3	
6	Bekentai Nurperzent	GD-24-1	3	
7	Zhaqslylyq Erdaulet	GD-24-1	3	
8	Qauysov NurasyI	GD-24-1	3	
9	Qauysov ErasyI	GD-24-1	3	
10	Kenesov Dias	GD-24-1	3	
11	Mazhitov Meiirzhan	GD-24-1	3	
12	Nurlanuly Farkhat	GD-24-1	3	
13	Romanuly Alinar	GD-24-1	3	
14	Seiitghanov Sabyrzhan	GD-24-1	3	
15	Serikbek Bagdat	GD-24-1	3	
16	Ualikhanuly ErasyI	GD-24-1	3	
17	Qaibolla ErasyI	GD-24-1	3	
18	Qartanbek Nurken	GD-24-1	3	
19	Qulakhmet Dinmukhamedmadi	GD-24-1	3	
20	Abushakhma Beksultan	GD-24-1	3	

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6B07262 Mining Educational Program

No.	Student's full name	Group	Year	Contact/note
1	Abdrazaq Aitolqyn	GD-25-1	2	
2	Abdullazhan Meiirzhan	GD-25-1	2	
3	Aitbaev Damir	GD-25-1	2	
4	Alibekuly Dias	GD-25-1	2	
5	Baqytuly Nurzhigit	GD-25-1	2	
6	Bauyrzhanuly Agzam	GD-25-1	2	
7	Dosan Nurila	GD-25-1	2	
8	Erdulla Orken	GD-25-1	2	
9	Karibaev Ramazan	GD-25-1	2	

No.	Student's full name	Group	Year	Contact/note
10	Qudaibergenova Arailym	GD-25-1	2	
11	Muratuly Erbolat	GD-25-1	2	
12	Nurgali Dias	GD-25-1	2	
13	Otegenov Meiirshat	GD-25-1	2	
14	Sansyzbai Dinmukhammed	GD-25-1	2	
15	Serzhanuly Meiirzhan	GD-25-1	2	
16	Shopan Aqzhurek	GD-25-1	2	