Mining and Metallurgical Institute named after O.A. Baikonurov
«Mine Surveying and Geodesy» department

EDUCATIONAL PROGRAM
7M07227 - «Mine surveying»

Code and classification of the field of education: **7M07 Engineering, Manufacturing and Civil engineering**
Code and classification of training areas: **7M072 Manufacturing and processing**
Group of educational programs: **M120 Mine surveying**
Level based on NQF: 7
Level based on IQF: 7
Study period: 2 years
Amount of credits: 120

Almaty 2025

Educational program 7M07227 – «Mine surveying» was approved at a meeting of the Academic Council of KazNRTU named after K.I.Satbayev.
Protocol №6 of 6.03.2025
Considered and recommended for approval at a meeting of the Educational and Methodological Council of KazNRTU named after K.I.Satbayev.
Protocol №2 of 20.12.2024

Educational program 7M07227 – «Mine surveying» developed by the academic committee in the direction of «Manufacturing and processing»

Full name	Academic degree/ academic title	Position	Place of work	Signature
Academic staff:				
Meirambek Guldana	PhD in Technical Sciences, Associate Professor	Head of Department of Surveying and geodesy	NPJSC «K.I. Satbayev Kazakh National Research Technical University»	
Zhakypbek Yryszhan	PhD, Associate Professor	Professor	NPJSC «K.I. Satbayev Kazakh National Research Technical University»	
Aitkazinova Shynar Kasymkanovna	PhD	Associate Professor	NPJSC «K.I. Satbayev Kazakh National Research Technical University»	
Employer:				
Mukhametov Yesen Serikovich	-	Acting Director	Almaty Regional Branch of RSE «GOSGRADCADASTR»	
Student:				
Iskakov Bolatbek Meirambekuly	-	1st year Doctoral Student	NPJSC «K.I. Satbayev Kazakh National Research Technical University»	

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List of abbreviations and designations

Reduction	Full name
SU	Satbayev University
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
AS	Academic staff
EP	Educational program
WC	Working curriculum
GIS	Geographic information system
LOED	Learning outcomes of the educational program
BD	Basic discipline
PD	Profile discipline
TUC	The university component
CC	Component of choice
SDG	Sustainable Development Goals
TUN	The United Nations

The educational program "Surveying" contributes to the achievement of the priority Sustainable Development Goals (SDGs) approved by the United Nations through the training of highly qualified specialists with competencies in geospatial analysis, monitoring of the geotechnical state of mining facilities, rational development of the subsoil and environmentally sound design. Graduates of the program play a key role in ensuring the sustainable and safe development of the mining industry, rational subsoil use, environmental protection and emergency prevention related to mining operations. The OP contributes to the achievement of the following SDGs:

SDG 4. Quality education is the formation of a sustainable system of high-quality, inclusive and affordable education that provides lifelong learning opportunities

SDG 9. Industrialization, innovation and infrastructure - the development of sustainable infrastructure and the introduction of scientific and technological innovations into the economy of the region and the country.

SDG 12. Responsible consumption and production is the development of a system of environmentally responsible consumption and production based on the principles of reduction, reuse and recycling.

SDG 13. Combating climate change – using geospatial technologies to monitor changes in the environment;

SDG 15. Conservation of terrestrial ecosystems is the monitoring and assessment of land use aimed at protecting and restoring natural ecosystems.

1. Description of the educational program

It is intended for the implementation of scientific and pedagogical training of masters in the educational program "Surveying" at Satbayev University.

2. The purpose and objectives of the educational program

Goal EP: training of highly qualified scientific, technical and engineering personnel in the field of surveying, geospatial digital technologies with a focus on the development of Master's competencies.

Tasks EP:

Task 1: The readiness of specialists for research and project work in the field of geodesy, cartography, geoinformatics, surveying and geospatial technologies, including in related fields related to the selection of necessary research methods, modification of existing and development of new methods based on a specific study.

Task 2: The readiness of specialists for production and technological activities that ensure the introduction of new digital developments at the local level.

Task 3: The readiness of specialists to search for and obtain new information necessary to solve professional tasks in the field of knowledge integration in relation to their field of activity, to actively participate in the activities of an enterprise or organization.

Task 4: The readiness of specialists for scientific, informational, ideological and problematic communications in the professional environment and in the audience of non-specialists with a clear and deep justification of their position, to engage in organizational, managerial and service activities, to be aware of the responsibility for making their professional decisions.

Task 5: The readiness of specialists for self-study and continuous professional development during the entire period of scientific or professional activity.

3. Requirements for the evaluation of learning outcomes of the educational program

Learning outcomes include knowledge, skills and competencies and are defined both for the educational program as a whole and for its individual modules, disciplines or tasks.

The main task at this stage is to select assessment methods and tools for all types of control, with the help of which it is possible to most effectively assess the achievement of planned learning outcomes at the discipline level.

4. Passport of the educational program

4.1. General information

№	Field name	Note
1	Code and classification of the field of education	7M07 Engineering, Manufacturing and Civil engineering
2	Code and classification of training directions	7M072 Manufacturing and processing
3	Educational program group	M120 Mine surveying
4	Educational program name	7M07227 Mine surveying
5	Short description of educational program	Designed for the implementation of scientific and pedagogical training of masters in the educational program "Surveying" at Satbayev University and developed within the framework of the direction "Geospatial digital Engineering"
6	Purpose of EP	Training of highly qualified scientific, technical and engineering personnel in the field of surveying, geospatial

		digital technologies with a focus on the development of Master's competencies
7	Type of EP	New EP
8	The level based on NQF	7
9	The level based on IQF	7
10	Distinctive features of EP	No
11	List of competencies of educational program	**General cultural competencies (GCC)** **GCC-1.** The ability to communicate effectively in Russian, Kazakh and a foreign language in a professional, academic and interdisciplinary environment. **GCC-2.**Teamwork skills, effective interaction with colleagues, contractors and customer representatives. **GCC-3.**The ability to make decisions in non-standard situations, critically comprehend problems and choose optimal solutions. **GCC-4.**Self-organization, time management and professional planning, setting goals and achieving results. **General Professional Competencies (GPC)** **GPC-1.** Knowledge of the regulatory framework in the field of subsoil use, surveying, occupational safety and industrial safety. **GPC-2.** Mastery of geodetic and surveying measurement methods, including in difficult mountain conditions. **GPC-3.** Skills in collecting, analyzing, and visualizing geospatial information while monitoring mountain features. **GPC-4.** Application of remote sensing, GIS and 3D scanning methods in surveying practice. **GPC-5.**Understanding the environmental, legal, and engineering aspects of subsurface development and protection. **Professional Competencies (PC)** **PC-1.** Performing high-precision surveying measurements during open-pit and underground mining operations. **PC-2.** Conducting surveying control over deformations of the Earth's surface, buildings, structures and workings. **PC-3.**Creation of surveying and geotechnical documentation, digital plans, maps and 3D models. **PC-4.**Processing and interpretation of spatial and geophysical data in specialized software packages. **PC-5.** Participation in the design and provision of safe mining operations with surveying support. **PC-6.** Development and registration of surveying reports, participation in research and engineering activities. **Digital Competencies (DC)** **DC-1.** Ownership of software for data surveying: AutoCAD Civil 3D, Surfer, Micromine, ArcGIS, QGIS, Carlson, Agisoft, Maptek, etc. **DC-2.** Ability to work with digital terrain models, 3D scans, satellite images, GNSS and laser scanning data. **DC-3.** Knowledge of the basics of working with spatial information databases, data storage and exchange systems in

		surveying. **DC-4.** The use of cloud and web platforms, Web-GIS, as well as the integration of digital technologies into surveying practice.
12	Learning outcomes of educational program	1.Apply the skills of management systems, means of increasing production efficiency and adapting modern information technologies to conduct the processes of mine surveying. 2.Understand the trends in the development of technologies for digitalization of geospatial data, the readiness to transform processes in the context of dynamic changes in processes in the production market, apply modern technologies for visualization and optimization of production processes in the field of mine surveying. 3.Apply the skills to express your thoughts freely and clearly in English and use it as a means of business communication at a professional level. 4.Be able to develop plans and programs for the organization of innovative activities in the mining sector and understand the economic efficiency using professional automated systems in solving mine surveying tasks. 5.To carry out planning for the development of mining operations and surveying control of the condition of mine workings, buildings, structures and the earth's surface at all stages of development and protection of the subsoil with industrial and environmental safety. 6.To carry out research and pedagogical work, to raise the intellectual and general cultural level, to improve the moral and physical development of personality in the competence of professional activity. 7.Master theoretical and practical skills, perform professional functions in the tasks of rational production of geodetic and mine surveying measurements, including substantiation of the type and type of geodetic instruments and equipment. 8.Be able to analyze and apply modern computer technologies, including web oriented GIS systems, to create database management systems, analyze mathematical processing methods, the ability to show creative initiative, prepare applications for inventions and industrial designs during mining works. Be able to analyze remote sensing data when monitoring changes in the natural environment and anthropogenic objects, in order to ensure the safe functioning of the population and sustainable economic growth of the country.
13	Education form	Full-time
14	Period of training	2 years
15	Amount of credits	120
16	Languages of instruction	Russian, Kazakh, English
17	Academic degree awarded	Master of Technical Sciences

18	Developers and authors	Department of MSaG

4.2. The relationship between the achievability of the formed learning outcomes according to the educational program and academic disciplines

№	Name of the discipline	Brief description of the discipline	Number of credits	Generated learning outcomes (codes)							
				LR1	LR2	LR3	LR4	LR5	LR6	LR7	LR8
Cycle of basic disciplines University component											
1.	Foreign language (professional)	The course is aimed at studying the main problems of scientific knowledge in the context of its historical development and philosophical understanding, the evolution of scientific theories, principles and methods of scientific research in the historical construction of scientific paintings of the world. The discipline will help to master the skills of developing critical and constructive scientific thinking based on research on the history and philosophy of science. At the end of the course, undergraduates will learn to analyze the ideological and methodological problems of science and engineering and technical activities in building Kazakhstan's science and the prospects for its development.	3							v	
2.	Psychology of management	The course is aimed at mastering the tools for effective employee management, based on knowledge of the psychological mechanisms of the manager's activity. Discipline will help you master the skills of making decisions, creating a favorable	3				v				

		psychological climate, motivating employees, setting goals, building a team and communicating with employees. At the end of the course, undergraduates will learn how to resolve managerial conflicts, create their own image, analyze situations in the field of managerial activity, as well as negotiate, be stress-resistant and effective leaders.									
3.	History and philosophy of science	to explore the history and philosophy of science as a system of concepts of global and Kazakh science. Content: the subject of philosophy of science, dynamics of science, the main stages of the historical development of science, features of classical science, non-classical and post-non-classical science, philosophy of mathematics, physics, engineering and technology, specifics of engineering sciences, ethics of science, social and moral responsibility of a scientist and engineer.	3				**v**				

4.	Higher school pedagogy	The course is aimed at mastering the methodological and theoretical foundations of higher education pedagogy. The discipline will help to master the skills of modern pedagogical technologies, technologies of pedagogical design, organization and control in higher education, skills of communicative competence. At the end of the course, undergraduates learn how to organize and conduct various forms of organizing training, apply active teaching methods, and select the content of training sessions. Organize the educational process on the basis of credit technology of education.	3				**v**				
Cycle of basic disciplines Elective component											
5.	Mine survey in the reclamation of disturbed lands	The discipline studies the concept of disturbed lands during the development of open-pit deposits; the extent of disturbed lands and changes in soil conditions during open-pit mining; landscape disturbance, transformation of soil cover and its development in open-pit mining; technical and biological stages of reclamation of disturbed lands.	5			**v**					
6.	Monitoring the movement of rocks during underground mining	Mastering the theoretical foundations and practical methods of studying the process of movement of rocks and the earth's surface in ore deposits, organizing and conducting observations of the movement of a rock mass, studying fracturing and determining the strength	5				**v**	**v**			

		properties of rocks, methods of monitoring during underground mining.									
7.	Mathematical modeling of field indicators	The discipline studies the basic methods of mathematical modeling and their application in applied mining and geological sciences, the theory of mathematical modeling, which allows you to build models of field indicators and judge their adequacy; scientific approaches to modeling field indicators; the basics of mathematical thinking, the use of mathematical language.	5				v	v			
8.	Geometrization of the structural and qualitative characteristics of the deposit	the study of the theoretical foundations and practical skills for solving problems and their graphical representation in various forms with the mandatory inclusion of patterns of placement of structural and qualitative indicators based on the geometrization of the subsoil and take into account the movement of mineral reserves, their loss and dilution; economically assess the completeness of mineral extraction; prepare surveying documentation for solving mining problems.	5			v		v			
9.	Mining audit	the study of methods for analyzing the reliability of the technical reporting of a mining enterprise and the compliance of its activities with existing regulatory legal acts and technical requirements; the methodology in the development of recommendations for the elimination of violations revealed as a result of the analysis is considered.	5		v	v					

10.	Methodology of continuous career design in inclusive education	Objective: it is aimed at mastering the methodology of continuous quarry design in market conditions, taking into account existing and new methods of intensive construction, technical re-equipment, phased development of deposits, adjustments to the mining transportation system, reconstruction and operation of quarries.	5								
11.	Sustainable development strategies	Graduate students will study the concepts and principles of sustainable development, the development and implementation of sustainable development strategies, the evaluation of their effectiveness, and international standards and best practices. Cases and examples of successful sustainable development strategies are included.	5								
12.	Creativity, Innovation, Leadership, and Entrepreneurship	Mastering methodologies for encouraging creativity and innovation in resource management practices. Using leadership theory and strategy to gain effective decision-making and management skills. The principles of entrepreneurship are considered, using the opportunities in the mineral resources sector to increase the economic effect.	5								
13.	Intellectual property and research	The purpose of this course is to provide undergraduates with the knowledge and skills necessary to understand, protect and manage intellectual property (IP) in the context of scientific research and innovation. The course is aimed at training specialists who can effectively	5								

		work with IP, protect the results of scientific research and apply them in practice.									
14.	Gamification in Eco-Mining	the study of the principles of gamification in the practice of ensuring environmental mining using elements of game design in non-gaming contexts. Innovative solutions are being considered to increase engagement, motivation and productivity in the mining industry. The possibilities of using gamification are being applied to promote sustainable safe mining practices and optimize mining processes.	5								
15.	Sustainable Business and Project Management	The discipline "Sustainable Business and Project Management" for undergraduates is aimed at teaching the principles and methods of creating and managing sustainable business projects, including the development of sustainable development strategies and the use of project management tools in conditions of variability and uncertainty. Master's students master project management methodologies, develop skills in analysis and risk assessment, and also prepare to solve case studies and participate in practical projects related to sustainable business. As a result of the training, they acquire the ability to develop sustainable business development strategies, plan, monitor and complete projects, as well as analytical and practical skills to effectively manage sustainable business	5								

		projects.									
Cycle of profile disciplines University component											
16.	Geospatial data visualization	The discipline aims to master the methods and concept of visual representation of spatial data (PD) obtained as a result of geodetic and surveying measurements for making managerial and engineering decisions and includes the following sections: geovisualization in the context of: points of view of related disciplines; geo-imaging; methods of visualization and representation of PD; interactive approaches to delineating the isosurface for geovisualization; multivariate mapping and classification; interpretation of spatial analysis results; Simulation of virtual environments ("True 3D", empirical research, VR/AR).	5					v			
17.	Laser scanning in quarries	The study of the use of a high-precision scanner device to reliably obtain data on the volume of mining and create 3D models of the object.	5						v		v
18.	Analysis of the accuracy of surveying work	the study of the issues of assessing the accuracy of underground planned and high-altitude surveying networks, which are the basis of surveying surveys; the accuracy of angular and linear measurements in mine workings; the laws of error accumulation in polygonometric and leveling courses, the development of methods for assessing the accuracy of orientation and methods	5			v		v			

		of equalizing underground networks.									
19.	Innovative surveying technology	Preparation of undergraduates for the production of surveying work, determining the state of the Earth's surface and subsurface, displaying information in accordance with modern regulatory requirements; apply modern software and technologies for processing underground and aboveground field measurements; apply GNSS in surveying, UAVs and underground and aboveground scanning systems.	5			**v**				**v**	
20.	Monitoring of the state of surface buildings and construction during the construction and operation of the underground	This discipline provides theoretical and practical knowledge about the methods of monitoring buildings and structures during the construction and operation of the subway to ensure safe operating conditions and to exclude the possibility of damage to the infrastructure of the city, surveying and geodetic surveys, geotechnical surveys and inspection of the technical condition of subway structures located in the zone of influence of new construction.	5			**v**					
21.	Mineral resources exploration and assessment	The study of the technique of exploration and evaluation of mineral resources based on the analysis of geological formations, with the identification of potential resources of mineral deposits using advanced technology of mapping	5								

		and resource assessment. Special attention is paid to the integration of geospatial data, remote sensing and software for geological modeling.									
22.	Rational use of mineral resources	the study of the strategy and methodology for the rational use of mineral resources, covering all stages of extraction, processing and use. Optimization techniques based on waste management practices and recycling strategies are considered to minimize environmental impacts and maximize resource efficiency, taking into account economic and environmental expediency.	5								
23.	Organization of scientific research	the organization of scientific research based on the familiarization of undergraduates with scientific knowledge, the formation of readiness and ability to conduct research activities related to the selection of necessary research methods, conducting experimental research and analyzing their results, based on modern achievements of domestic and foreign scientists and opens the way to the introduction of new developments.	5								
24.	Remote sensing of the Earth and natural resources	formation of remote sensing data processing skills using modern software, classification and interpretation of the results obtained, correct design of the results and preparation of accounting documentation.	4								
Cycle of profile disciplines											

Component of choice											
25.	WEB-GIS in subsurface use	This discipline is an alternative to the discipline of Web GIS and provides theoretical and practical knowledge about the concept and technical foundations of web GIS, geoportals, meshes, mobile GIS. Develops skills in using web GIS technologies to create, manage, and analyze databases on deposits, subsurface use licenses, mineral reserves, infrastructure, etc. using ESRI products (ArcGIS online, server) and open resources (QGIS, Mapserver, Geoserver) as an example.	5	v				v			
26.	WEB GIS	The discipline is focused on the formation of ideas and understandings about the concepts and technical foundations of web GIS; the study of the possibilities of web GIS technologies on the example of ESRI products (ArcGIS online, server) and on the example of open resources (QGIS, Mapserver, Geoserver); geospatial web services, geoportals, meshes, mobile GIS, the creation of interactive online maps to solve problems in the field of geodesy, cartography, surveying.	5					v			
27.	Resources modelling and evaluation	the study and application of modeling techniques for the assessment and management of mineral resources based on geological, geophysical and geochemical data in order to create predictive models of mineral deposits. Assessment of the quality and quantity of	5								

		mineral resources, based on statistical analysis and computer simulation for decision-making related to the exploitation of resources. Consideration of the methodology of uncertainty and risk analysis in order to improve the reliability of estimates and optimize resource allocation strategies.								

5. Curriculum of the educational program

NON-PROFIT JOINT STOCK COMPANY
"KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY NAMED AFTER K.I. SATBAYEV"

SATBAYEV UNIVERSITY

«APPROVED»
Decision of the Academic Council
NPJSC«KazNRTU
named after K.Satbayev»
dated 06.03.2025 Minutes №10

WORKING CURRICULUM

Academic year	2025-2026 (Autumn, Spring)
Group of educational programs	M120 - "Mine surveying"
Educational program	7M07227 - "Mine surveying"
The awarded academic degree	Master of Technical Sciences
Form and duration of study	full time (scientific and pedagogical track) - 2 years

Discipline code	Name of disciplines	Block	Cycle	Total ECTS credits	Total hours	lek/lab/pr Contact hours	in hours SIS (including TSIS)	Form of control	Allocation of face-to-face training based on courses and semesters				Prerequisites
									1 course		2 course		
									1 sem	2 sem	3 sem	4 sem	
CYCLE OF GENERAL EDUCATION DISCIPLINES (GED)													
CYCLE OF BASIC DISCIPLINES (BD)													
M-1 Module of basic training (university component)													
LNG213	Foreign language (professional)		BD, UC	3	90	0/0/30	60	E	3				
HUM214	Psychology of management		BD, UC	3	90	15/0/15	60	E	3				
MAP228	Geometrization of the structural and qualitative characteristics of the deposit	1	BD, CCH	5	150	30/0/15	105	E	5				MAP138
MAP731	Creativity, Innovation, Leadership, and Entrepreneurship	1	BD, CCH	5	150	15/0/30	105	E	5				
MNG782	Sustainable development strategies	1	BD, CCH	5	150	30/0/15	105	E	5				
MAP728	Mathematical modeling of field indicators	2	BD, CCH	5	150	15/0/30	105	E	5				
MAP729	Monitoring the movement of rocks during underground mining	2	BD, CCH	5	150	15/0/30	105	E	5				
MAP732	Gamification in Eco-Mining	2	BD, CCH	5	150	15/0/30	105	E	5				
MNG781	Intellectual property and research	2	BD, CCH	5	150	30/0/15	105	E	5				
HUM212	History and philosophy of science		BD, UC	3	90	15/0/15	60	E		3			
HUM213	Higher school pedagogy		BD, UC	3	90	15/0/15	60	E		3			
MAP230	Mining audit	1	BD, CCH	5	150	30/0/15	105	E		5			MAP138
MAP726	Mine survey in the reclamation of disturbed lands	1	BD, CCH	5	150	15/0/30	105	E		5			
MNG783	Sustainable Business and Project Management	1	BD, CCH	5	150	15/0/30	105	E		5			
MIN220	Methodology of continuous career design in inclusive education	1	BD, CCH	5	150	30/0/15	105	E		5			
M-3 Practice-oriented module													
AAP273	Pedagogical practice		BD, UC	8				R				8	
CYCLE OF PROFILE DISCIPLINES (PD)													
M-2 Module of professional activity (university component, component of choice)													
MAP245	Laser scanning in quarries		PD, UC	5	150	30/0/15	105	E	5				MAP138
MAP733	Mineral resources exploration and assessment		PD, UC	5	150	15/0/30	105	E	5				
MAP255	Monitoring of the state of surface buildings and construction during the construction and operation of the underground		PD, UC	5	150	30/0/15	105	E		5			
MAP238	Organization of scientific research		PD, UC	5	150	30/0/15	105	E		5			MAP138
MAP710	WEB-GIS	1	PD, CCH	5	150	15/0/30	105	E		5			
MAP711	WEB-GIS in subsurface use	1	PD, CCH	5	150	15/0/30	105	E		5			
MAP735	Resources modelling and evaluation	1	PD, CCH	5	150	15/0/30	105	E		5			
MAP269	Innovative surveying technology		PD, UC	5	150	15/0/30	105	E			5		
MAP734	Rational use of mineral resources		PD, UC	5	150	15/0/30	105	E			5		
MAP730	Geospatial data visualization		PD, UC	5	150	15/0/30	105	E			5		
MAP294	Analysis of the accuracy of surveying work		PD, UC	5	150	30/0/15	105	E			5		
MAP741	Remote sensing of the Earth and natural resources/		PD, UC	4	120	30/0/15	75	E			4		
M-3 Practice-oriented module													
AAP256	Research practice		PD, UC	4				R			4		
M-4 Experimental research module													
AAP268	Research work of a master's student, including internship and completion of a master's thesis		RWMS	4				R	4				
AAP268	Research work of a master's student, including internship and completion of a master's thesis		RWMS	4				R		4			
AAP251	Research work of a master's student, including internship and completion of a master's thesis		RWMS	2				R			2		
AAP255	Research work of a master's student, including internship and completion of a master's thesis		RWMS	14				R				14	
M-5 Module of final attestation													
ECA212	Registration and protection of the master thesis		FA	8								8	
Total based on UNIVERSITY:									30	30	30	30	
									60		60		

Number of credits for the entire period of study

Cycle code	Cycles of disciplines	Credits			
		Required component (RC)	University component (UC)	Component of choice (CCH)	Total
GED	Cycle of general education disciplines	0	0	0	0
BD	Cycle of basic disciplines	0	20	15	35
PD	Cycle of profile disciplines	0	48	5	53
Total for theoretical training:		**0**	**68**	**20**	**88**
RWMS	Research Work of Master's Student				24
ERWMS	Experimental Research Work of Master's Student				0
FA	Final attestation				8
TOTAL:					**120**

Decision of the Educational and Methodological Council of KazNRTU named after K.Satpayev. Minutes №3 dated 20.12.2024

Decision of the Academic Council of the Institute. Minutes №4 dated 12.12.2024

Signed:

Governing Board member - Vice-Rector for Academic Affairs — Uskembayeva R. K.

Approved:

Vice Provost on academic development — Kalpeyeva Z. K.

Head of Department - Department of Educational Program Management and Academic-Methodological Work — Zhumagaliyeva A. S.

Director - Mining and Metallurgical Institute named after O.A. Baikonurov — Ryshkov K. .

Department Chair - Surveying and geodesy — Moimenbek G. .

Representative of the Academic Committee from Employers ___Acknowledged___ — Mukhametov Y.