



**Mining and Metallurgical Institute named after O.A. Baikonurov  
Department of «Metallurgy and Mineral Processing»**

**DOUBLE DIPLOMA DEGREE PROGRAM**

**7M07229 Extractive metallurgy**

Code and classification of the field of education:	7M07 Engineering, manufacturing and construction industries
Code and classification of training directions:	7M072 Industrial and manufacturing branches
Group of educational programs:	M117 Metallurgical Engineering
Level based on NQF:	7
Level based on	7
IQF: Study period: Amount of credits:	2 years 120

**Almaty 2025**


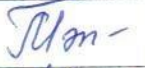



Double diploma educational program 7M07229 Extractive metallurgy was approved at the meeting of K.I. Satbayev KazNRTU Academic Council

Protocol № 4 dated « 12 » 12 2024.

was reviewed and recommended for approval at the meeting of K.I. Satbayev KazNRTU Educational and Methodological Council

Protocol № 3 dated « 20 » 12 2024.

Double diploma educational program 7M07229 Extractive metallurgy was developed by Academic committee based on direction of 7M072 Industrial and manufacturing branches

Full name	Academic degree/ academic title	Position	Workplace	Signature
<b>Chairperson of Academic Committee:</b>				
Barmenshinova M.B.	c.t.s., associate professor	Head of the department of Metallurgy and Mineral Processing	K.I.Satbayev KazNRTU	
<b>Teaching staff:</b>				
Moldabayeva G.Zh.	c.t.s., associate professor	Professor of the Department of MaMP	K.I.Satbayev KazNRTU	
Ussoltseva G.A.	c.t.s.	Associate professor of the Department of MaMP	K.I.Satbayev KazNRTU	
<b>Employers:</b>				
Ospanov Yerzhan	d.t.s.	Head of Department of complex processing of technogenic raw materials	Kazakhmys Holding LLP	
<b>Students:</b>				
Sagyndyk A.N.	bachelor engineering technology	2 <sup>nd</sup> year student	«Kaz Minerals» LLP	

### General information

№	Field name	Comments
1	Code and classification of the field of education	7M07 Engineering, manufacturing and construction industries
2	Code and classification of training directions	7M072 Industrial and manufacturing branches
3	Educational program group	M117 Metallurgical Engineering
4	Educational program name	7M07229 Extractive Metallurgy
5	Short description of educational program	The educational program Extractive Metallurgy includes industry-specific, priority, fundamental, natural science, general engineering, practice-oriented and professional training of masters in the field of extractive metallurgy, aimed at modern, complex, resource-saving, lean and sparing processing of raw materials and production of products with increased added value, to obtain energy-generating metals in accordance with with an atlas of new professions, production requests and trends in the global metals market.
6	Purpose of EP	Formation of personnel for "Society and Economy 5.0" based on "Industry 4.0" in the field of metallurgy, training in the transformation of technologies to the conditions of depletion of ores, increasing the volume of processed raw materials for critically important non-ferrous metals; training in the transformation of technologies for processing waste of the metallurgical industry, in which they return to economic circulation in the form of renewable fuels, secondary raw materials or marketable products, transformation of the ideology of sparing production, resource conservation at industry enterprises, reduction of the "Carbon footprint" of technologies; formation of competencies for obtaining energy-generating metals; training in the transformation of automation technologies and robotization of metallurgical production.
7	Type of EP	Innovative
8	The level based on NQF	7
9	The level based on IQF	7
10	Distinctive features of EP	Double diploma
11	Education form	Full - time
12	Period of training	2 years
13	Amount of credits	120
14	Languages of instruction	Kazakh ,russian, english
15	Academic degree awarded	Master of Technical Sciences
16	Developers and authors	Barmenshinova M.B. Chepushtanova T.A.