Mining and Metallurgical Institute named after O.A. Baikonurov

Department of Metallurgy and Mineral Processing

EDUCATIONAL PROGRAM

8D07213 Extractive metallurgy and advanced materials

Code and classification of the field of education	8D07 – Engineering, manufacturing and construction industries
Code and classification of training directions	8D072 – Industrial and manufacturing branches
Educational program group	D117 – Metallurgical engineering
The level based on NQF	8
The level based on IQF	8
Period of training	3 years
Amount of credits	180

Almaty 2026

The Educational program 8D07213 - Extractive metallurgy and advanced materials was approved at the meeting of the Management Board of Satbayev University
Minutes No. _5__ dated «_10_» __03__2026

Reviewed and recommended for approval at the meeting of the Educational and Academic Council of K.I. Satbayev Kazakh National Research Technical University
Minutes No. _8__ dated «_26_» __02__2026

Reviewed and recommended for approval at the meeting of the Educational and Methodological Council of K.I. Satbayev Kazakh National Research Technical University
Minutes No. _3__ dated «_25_» __12__2025.

The Educational program 8D07213 - Extractive metallurgy and advanced materials was was reviewed and developed at the meeting of the Academic Committee.
Minutes No. _4__ dated «_28_» __11__2025.

General information

№	Field name	Comments
1	Code and classification of the field of education	8D07 – Engineering, manufacturing and construction industries
2	Code and classification of training directions	8D072 – Industrial and manufacturing branches
3	Educational program group	D117 – Metallurgical Engineering
4	Educational program name	8D07213 - Extractive metallurgy and advanced materials
5	Short description of educational program	The educational program «8D07213 – Extractive Metallurgy and Advanced Materials» focuses on the training of highly qualified scientific and engineering personnel with advanced knowledge in the theory and practice of processing ore and man-made resources, as well as the development of innovative materials for modern industry, in accordance with the goals of sustainable development and the ESG concept. The program covers the full cycle of extractive metallurgy, from the extraction and processing of raw materials to the production of end products with high added value.
6	Purpose of EP	Training of doctors in the field who are able to conduct scientific research and develop innovative, resource-saving and environmentally friendly technologies for extracting strategic and rare metals, producing refractory alloys and advanced materials, using modern digital, SX-EW and additive technologies, ensuring the sustainable development and competitiveness of the industry.
7	Type of EP	Innovative
8	The level based on NQF	8
9	The level based on IQF	8
10	Distinctive features of EP	no
11	Education form	Full-time
12	Period of training	3 years
13	Amount of credits	180
14	Languages of instruction	Kazakh, russian, english
15	Academic degree awarded	Doctor of Industry
16	Developers and author:	Barmenshinova M.B., Chepushtanova T.A.