



**Mining and Metallurgical Institute named after O.A. Baikonurov**  
**Department of Chemical Processes and Industrial Ecology**

**EDUCATIONAL PROGRAM**

**6B07217 Technology of rare and radioactive elements**

Code and name of educational program

Code and classification of the field of education: **6B07 Engineering, manufacturing and construction industries**

Code and classification of training directions: **6B072 Industrial and manufacturing branches**

Group of educational programs: **6B071 Mining and mineral extraction**

Level based on NQF: **6**

Level based on IQF: **6**

Study period: **4**



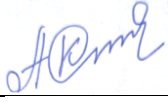






Amount of credits: **240**

**Almaty 2025**

Educational program 6B07217 Technology of rare and radioactive elements was approved at the meeting of K.I. Satbayev KazNRTU Academic Council Minutes # 10 dated «06» March 2025.

was reviewed and recommended for approval at the meeting of K.I. Satbayev KazNRTU Educational and Methodological Council Minutes # 3 dated «20» December 2025.

Educational program 6B07217 Technology of rare and radioactive elements was developed by Academic committee based on direction «6B072 Industrial and manufacturing branches»

Full name	Academic degree/ academic title	Position	Workplace	Signature
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## General information

№	Field name	Comments
1	Code and classification of the field of education	6B07 Engineering, manufacturing and construction industries
2	Code and classification of training directions	6B072 Industrial and manufacturing branches
3	Educational program group	6B071 Mining and mineral extraction
4	Educational program name	6B07217 Technology of rare and radioactive elements
5	Short description of educational program	<p>The educational program is a set of documents developed by the Kazakh National Research Technical University named after K.I. Satbayev. The EP takes into account the needs of the regional labor market, the requirements of state bodies and relevant industry requirements. EP is based on the state compulsory standards of higher and postgraduate education.</p> <p>EP defines program educational goals, student learning results, necessary conditions, content and technologies for the implementation of the educational process, assessment and analysis of the quality of students during training and after graduation.</p> <p>EP includes curriculum, discipline content and learning outcomes and other materials to ensure quality education for students.</p>
6	Purpose of EP	Training of highly qualified, competitive and in-demand specialists in the labor market for mining and processing, chemical and chemical-metallurgical enterprises of the Republic of Kazakhstan, capable of carrying out professional activities in the field of chemical technology of rare, rare-earth metals and radioactive elements, taking into account the requirements of ecology and environmental protection
7	Type of EP	Innovative EP
8	The level based on NQF	6
9	The level based on IQF	6
10	Distinctive features of EP	No
11	Education form	full-time
12	Period of training	4
13	Amount of credits	240
14	Languages of instruction	Russian, Kazakh, English
15	Academic degree awarded	Bachelor of Engineering and Technology
16	Developer(s) and authors	Kubekova Sh., Kapralova V., Kalenova A., Raimbekova A.