**Mining and Metallurgical Institute named after O.A. Baikonurov**

**Department of "Materials Science, Nanotechnology and Engineering Physics"**

# EDUCATIONAL PROGRAM

## 8D07114 Nanomaterials and Nanotechnology

Code and classification of the field of education:
**8D07 Engineering, manufacturing and construction industries**
Code and classification of training directions:
**8D071 Engineering and Engineering affairs**
Group of educational programs:
**D108 Nanomaterials and nanotechnologies**

Level based on NQF: 8
Level based on IQF: 8
Study period: 3 years
Amount of credits: 180

**Almaty 2026**

The Educational Program 8D07114 Nanomaterials and Nanotechnology 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 8D07114 Nanomaterials and Nanotechnology was reviewed and developed at the meeting of the Academic Committee.

Minutes No. 2 dated «20» 10 , 2025.

## 1.1. General information

| № | Field name | Comments |
|---|---|---|
| 1 | Code and classification of the field of education | 8D07 Engineering, processing and construction industries |
| 2 | Code and classification of training directions | "8D071 Engineering and Engineering |
| 3 | Educational program group | D108 Nanomaterials and nanotechnology |
| 4 | Educational program name | 8D07114 Nanomaterials and Nanotechnology |
| 5 | Short description of educational program | Educational program 8D07114 "Nanomaterials and Nanotechnology" is the last qualification level of the three-level higher education system |
| 6 | Purpose of EP | The program is aimed at training scientific and scientific-pedagogical personnel conducting research in the field of synthesis of nanostructures, development of nanomaterials and nanotechnologies in interdisciplinary areas, as well as commercialization of scientific and technological developments. |
| 7 | Type of EP | New EP |
| 8 | The level based on NQF | 8 |
| 9 | The level based on IQF | 8 |
| 10 | Distinctive features of EP | No |
| 13 | Education form | Full - time |
| 14 | Period of training | 3 |
| 15 | Amount of credits | 180 |
| 16 | Languages of instruction | Kazakh, Russian, English |
| 17 | Academic degree awarded | Doctor of Philosophy (PhD). |
| 18 | Developer(s) and authors | Mutushev AlibekZhumabekovich<br>Kakimov Ulan Kadyrkhanuly<br>Azat Seythan<br>Kudaibergenov Kenes Kakimovich<br>Kemelbekova Ainagul Erzhanovna<br>Yetish Talshyn Erbolkyzy |