



Geology and Oil-gas Business Institute named after K. Turyssov
Department of Chemical and Biochemical Engineering

EDUCATIONAL PROGRAM
7M05105 Biotechnology

Code and classification of the field of education: 7M05 Natural Sciences, Mathematics and Statistics

Code and classification of training areas: 7M051 Biological and related sciences

Group of educational programs: M082 Biotechnology

Level according to the NQF: 7

Level according to the IQF: 7

Duration of study: 2 years

Volume of loans: 120

Almaty 2025







Educational program 7M05105 Biotechnology was approved at the meeting of K.I. Satbayev KazNRTU Academic Council

Protocol №10 from «06» 03 2025y

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

Protocol №3 from «20» 12 2024y

Educational program 7M05105 Biotechnology was developed by Academic committee based on direction 7M051 «Biological and related Sciences»

Name	Academic degree/ academic	Post	Place of work	Signature
Chairman of the Academic Committee:				
Belkozhaev Ayaz Maratovich	Doctor PhD	Associate Professor	Kazakh National Research Technical University named after K.I.Satpayev	
Teaching staff:				
Narmuratova Zhanar Bakhytovna	Doctor PhD	Associate Professor	Kazakh National Research Technical University named after K.I.Satpayev	
Mangazbaev a Rauash Amantaevna	Candidate of Chemical Sciences, Associate Professor	Associate Professor	Kazakh National Research Technical University named after K.I.Satpayev	
Sandybayeva Sandugash Kalzhankyzy	-	Lecturer	Kazakh National Research Technical University named after K.I.Satpayev	
Employers				
Jamalova Gulya Abaevna	Candidate of Agricultural Sciences	Associate Professor	General Director of Scientific Diagnostic Center "Animal expert group" LLP	
Students:				
Amantai Indira	-	Student	Kazakh National Research Technical University named after K.I.Satpayev	

General information

№	Field name	Comments
1	Code and classification of the field of education	7M05 Natural Sciences, Mathematics and Statistics
2	Code and classification of training directions	7M051 Biological and related sciences
3	Educational program group	M082 Biological and related sciences
4	Educational program name	7M05105 Biotechnology
5	Short description of educational program	The biotechnology degree program provides a deep understanding of how to design and use modern life science-based manufacturing processes, considering product quality, sustainability and finance. Graduates have the competencies and skills to use cells, cellular components and biomolecules to produce goods such as chemicals, food, biofuels and biomaterials to develop a sustainable society. The educational program includes advanced training courses on biotechnological tools used for the development of industrial processes, the sustainable production of goods and the impact of such processes on the environment and society.
6	Purpose of EP	Training highly qualified scientific and pedagogical personnel in biotechnology with modern professional competencies and skills necessary to solve practical problems and ensure the sustainable development of biotechnological production, including its efficient organization, management, and implementation of innovative and environmentally friendly technologies.
7	Type of EP	New
8	The level based on NQF	7
9	The level based on IQF	7
10	Distinctive features of EP	no
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 Science
16	Developer(s) and authors	Belkozhayev A.M, Mangazbayeva R.M, Narmuratova Z.B.