



**SATBAYEV
UNIVERSITY**

A. Burkitbayev Institute of Power and Mechanical Engineering

Department of «Mechanical engineering»

EDUCATIONAL PROGRAM

6B07220 - Machines and technologies for processing new materials

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: B069 Production of materials (glass, paper, plastic, tree)

Level based on NQF: 6

Level based on IQF: 6

Study period: 4 years

Amount of credits: 240

Almaty 2025

Educational program 6B07220 – Machines and technologies for
(code and name of educational program)

processing new materials was approved at the meeting of K.I. Satbayev
KazNRTU Academic Council

Minutes 10 dated «06» 03 2025.

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

Minutes 3 dated «20» 12 2024.

Educational program 6B07220 – Machines and technologies for
(code and name of educational program)

processing new materials

was developed by Academic committee on direction "6B072- Industrial and
manufacturing branches"

Full name	Academic degree/ academic title	Position	Workplace	Signature
Teaching staff:				
Nugman E.Z.	Doctor PhD, Associate Professor	Head of the Department of "Mechanical Engineering"	Institute of Energy and Mechanical Engineering named after A.Burkitbaev	
Kerimzhanova M.F.	Candidate of Technical Sciences, Docent	Professor	Department of Mechanical Engineering	
Uderbayeva A.E.	Doctor PhD	Assoc. Professor	Department of Mechanical Engineering	
Employers:				
Andreev V.I.		General Director	Kazecotech STE LLP	
Students				
Myrzakhan A.		1st year doctoral student	Department of "Mechanical Engineering"	

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	B069- Production of materials (glass, paper, plastic, tree)
4	Educational program name	6B07220 Machines and technologies for processing new materials
5	Short description of educational program	The educational program establishes the fundamental principles of manufacturing technologies for processing and forming materials under pressure. Students acquire advanced knowledge of additive manufacturing technologies, as well as skills in modeling and analyzing various material processing processes, including plastic deformation of materials, design of manufacturing and industrial systems, and the use of modern computer equipment and technologies. The program places primary emphasis on developing competencies in part manufacturing and the design of technological operations, as well as in the development and implementation of control programs, and the preparation and use of structured documentation for designing part manufacturing processes.
6	Purpose of EP	Training of highly qualified and competitive specialists to successfully solve scientific and engineering problems, capable of solving scientific and engineering problems in the field of materials processing, taking into account development control. The program focuses on the design and implementation of progressive, resource-saving and environmentally sound technological processes, the development of innovative employment, as well as ensuring high-quality, accessibility and practice-oriented training in order to implement the SDGs.
7	Type of EP	New
8	The level based on NQF	6
9	The level based on IQF	6
10	Distinctive features of EP	-
11	Education form	full-time
12	Period of training	4 years
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	The educational program was developed by Academic committee on direction "6B072 - Industrial and manufacturing branches"