## **Development plan**

## EP 8D07303 "Civil engineering and production of building materials and structures" and 8D07308 (8D07305) "Production of building materials, products and structures" for the preparation of the Satbayev University Development Program for the period 2022-2025.

## Introduction

The main strategic goal of the SiSM department for the period up to 2025 is the further development of educational programs **8D07303** "Civil engineering and production of building materials and structures" and **8D07308** (**8D07305**) "Production of building materials, products and structures". The realization of this goal implies the solution of the following interrelated tasks.

	Educational a	ctivities		
<b>Goal.</b> Achieving high-quality, meeting modern requirements of a high level of education and training of specialists		<b>The target indicator.</b> Recognition of the high status of the department as the leading department of the Republic.		
N⁰	Main tasks	Indicators Deadlin		Deadline
1.1	Completion of transitions to a three-stage bachelor's- Master's-doctoral PhD training model	doct 8D0 proc and 1.1.2 8D0 of b	aining educational grants for toral studies PhD in OP 07303 "Civil engineering and duction of building materials structures" 07308 (8D07308) "Production uilding materials, products structures".	August, 2022
1.2	Partnership with leading foreign universities under the PhD program	1.2.1 Scientific and practical internships in foreign scientific centers at the expense of the university's funds under the PhD program.		According to the plan Satbayev University
1.3	Strengthening the practical professional component of knowledge and the introduction of student- centered education	<ul> <li>1.3.1 Revision of the content of RP disciplines and RUPS of specializations with a focus on student-centered education and strengthening professional competence</li> <li>1.3.2 Step-by-step equipment of educational laboratories with modern devices according to the "Zhas Maman" program</li> </ul>		June, 2022
				2022-2025
	Research activitie	~		
<b>Goal.</b> Activation of scientific research work of teaching staff and students.		n work of	<b>The target indicator.</b> Strengthening the scientific schools of leading scientists, creating a scientific and experimental workshop to raise funds through research, contractual work and the provision of services.	

N⁰	Main tasks	Indicators	Deadline
2.1	Development of scientific schools of leading scientists of the department	2.1.1 Adjustment of the main priorities of scientific directions and implementation of the work of scientific schools of scientists.	May,2023
		2.1.2 Establishment of horizontal links between the faculty of the Department and foreign scientists and researchers for joint projects.	Constantly
		2.1.3 Participation of teaching staff and undergraduates in tenders and grants of the Ministry of Education and Science of the Republic of Kazakhstan	Constantly
		2.1.5 Publication of articles and scientific papers in journals and publications with an impact factor according to JSR data or indexed in the Web of Science Core Collection database, as well as in publications with a CiteScore percentile index of at least 25 in the Scopus database. Publication of articles and scientific papers in journals from the List of publications of the KKSON.	Constantly
2.2	Formation of the material and technical base of the research laboratory of the department	2.2.1 The search for additional space for the creation of an experimental workshop of the research center of the department	2023-2024
		2.2.2 Step-by-step equipment of the experimental workshop with equipment and modern devices in order to perform: a) innovative projects for the disposal of waste from the mining industry with the extraction of valuable components ; b) scientific research works that precede the provision of services to industrial enterprises for environmental impact assessment, the development of projects for MPD and MPD, environmental passports, certification of workplaces, declaration of potentially hazardous facilities.	2023-2024

N⁰	Main tasks	Indicators	Deadline	
	Development of infrastructure and information resources			
<b>Goal.</b> Providing comfortable conditions for learning and teaching.		<b>The target indicator.</b> Equipping with the most advanced technical training tools to improve the professional level of teaching staff and the quality of training of specialists in demand by the labor market.		
No	Main tasks	Indicators	Deadline	
	Modernization and material support of educational laboratories and multimedia classrooms	3.1.2 Provision of the educational process with modern educational equipment, multimedia equipment, modern complexes and educational laboratories	2022-2025	
		resources		
Goal. Formation of a highly professional, efficient team.		The target indicator. Achievement of high scientific and pedagogical skills of teaching staff. Compliance of teaching and support staff with the requirements of an innovative university.		
4.1	Search and training of personnel	4.1.1 Improving the methods of searching for a personnel reserve.	Constantly	
		4.1.3 Attracting established scientists to teaching.	Constantly	
4.2	Professional development of teaching staff	4.2.1 Completion of 20% of annual professional development courses, including internships for teaching staff at the workplace	According to the plan of the department	
4.3	Knowledge of English	4.3.1 Organization of English language courses, availability of a mandatory certificate for mastering the language level.	According to the plan of the department	
International cooperation				
Goal. International recognitionThe target indicator. Internationalization of learning and all other processes.			ation of learning	

N⁰	Main tasks	Indicators	Deadline

5.1	International projects of the Department	5.1.1 Organization of teaching by leading professors of foreign partner universities for masters and doctoral students of the department.	2023-2024
		5.1.2 Participation in international competitions of teaching staff and masters	Constantly

SWOT analysis of the development schedule of OP 8D07303-"Civil engineering and production of building materials and structures" and 8D07308 (8D07305)-" Production of building materials, products and structures"

S-strengths	W-weaknesses
1. The teachers have a fairly high degree of	1. Insufficient material and technical base of
education.	the department for conducting research in
2. Attractiveness for applicants of the brand.	scientific areas of the department.
3. Educational and methodological provision	2. Low percentage of teaching staff who
of educational programs.	speak English.
O - opportunities	T- threats
1. Activation of research work by the staff of	1. The length of the educational process
the department with final commercialization,	during the day.
provided that an equipped experimental	
workshop for the disposal of industrial waste	
is organized.	
2. Provision of paid services to enterprises	
and organizations for conducting research.	
3. Organization of paid courses for advanced	
training of university teachers and employees	
of industrial enterprises.	
4. Implementation of educational services for	
PhD preparation	