DEVELOPMENT PLAN OF THE EDUCATIONAL PROGRAM
8D07110 - "Digital Engineering of Machinery and Equipment"
for 2020 - 2025

Areas of activity	Events	Timing					Responsible	Implementation mechanism
		2020-2021	2021-2022	2022-2023	2023-2024	2024-2025		
1 . Effective management of high-quality implementation of the educational program and improvement of educational process management mechanisms	1.1. Providing the EP with regulatory documents of the Ministry of Education and Science of the Republic of Kazakhstan: GOSO, internal regulatory documents of NAO KazNTRU named after K.I. Satpayev (provisions, instructions, forms)	+	+	+	+	+	Head of the department, academic staff	Obtaining the necessary documentation from the portal KazNTRU, DKR, QMS
	1.2. Formation and improvement of the EP structure	+	+	+	+	+	Head of the department, academic staff	Continuous monitoring of the EP structure in accordance with the standards of the Republic of Kazakhstan

		+	+	+	+	+	Head of the department, academic staff	Development of the logical structure of the EP on the principle of modularity in accordance with prof. standards of the Republic of Kazakhstan and competencies of the specialty. Annual monitoring of the MEP with additions and changes
	1.3 Development and improvement of the modular principle of EP formation							
	1.4. Opening of a double-degree EP in cooperation with foreign partner universities		+	+	+	+	Head of the department	Silesian University of Technology (Poland)
2. Training of competitive personnel for the implementation of government programs	2.1 Development and improvement of EP based on the introduction of modern educational technologies and methods into the educational process	+	+	+	+	+	Head of the department, academic staff	The use of modern educational technologies and methods in the educational process, providing the skills of scientific thinking, creative approach, independent research work
	2.2. Development and improvement of syllabuses of disciplines	+	+	+	+	+	Head of the department, academic staff	Constant monitoring of syllabuses, annual updating of topics of lectures and practical classes, competencies acquired by a doctoral student as a result of passing the discipline, the development of new special courses, textbooks and teaching aids based on courses given by invited professors and passing refresher courses.

	2.3. Improving the provision of doctoral students with educational and methodological literature (EML) and information sources	+	+	+	+	+	Head of the department, academic staff	Updating and supplementing the list of educational and methodological literature in syllabuses, Continuous work of academic staff with Internet sources, Submission of an application for the acquisition of EML
	2.4. Improving the methods and forms of assessing the knowledge of doctoral students	+	+	+	+	+	Head of the department, academic staff	Improving the forms of examinations, forms of conducting the IWD, Increasing the activity on the IWDL, the use of innovative technologies
3. Improving the quality of EP staffing	3.1. Professional development of academic staff	+	+	+	+	+	Head of the department, academic staff	Professional development of teaching staff through: 1) Foreign internships; 2) Certification of teaching staff through online courses Coursera and other platforms 3) Passing advanced training courses in the disciplines taught
	3.2. Invitation of leading scientists from universities under an international cooperation agreement	+	+	+	+	+	University's authorities, Head of the department	Reading lectures and conducting trainings for doctoral students by invited professors of foreign universities, in accordance with agreements on cooperation between universities

	3.3. Inviting practitioners from production and the business environment to give lectures and conduct practical exercises		+	+	+	+	Head of the department, academic staff	Conducting trainings and master classes by experienced specialists from production and research organizations
4. Research and innovation activities in the development of EP	4.1. Intensification of scientific research of academic staff	+	+	+	+	+	Head of the department, academic staff	Publications of scientific research of academic staff in foreign and domestic editions
	4.2. Participation in international, republican grant research and projects	+	+	+	+	+	Head of the department, academic staff	Development of applications for a competition for grant funding of scientific research, competitions among young scientists
5. Development of resource potential for the implementation of EP	5.1. Improving the development of the EP with material and technical resources and applied software packages	+	+	+	+	+	Head of the department, academic staff	Inclusion of the necessary laboratory facilities in the annual plans for state purchases of KazNTRU
	5.2. Provision of software products for EP disciplines	+	+	+	+	+	Head of the department, academic staff	Applications for the installation of software packages for processing scientific experiments and computer modeling of processes and machines

5.3. Development of information and educational resources of the department (website, portal, electronic syllables, lecture notes)	+	+	+	+	+	Head of the department, academic staff	According to the work plan of the department, Updating information topics on the website, portal.

Head of Department

of "Technological machines,

transport and logistics"

K.K. Yelemessov