The objective of the educational program is to provide a comprehensive and high-quality training of competitive, highly qualified specialists who are ready to solve practical and theoretical problems of professional activity in modern conditions on the basis of the development of skills and abilities necessary for a future specialist.

The educational program "Operational and Service Engineering" covers the specialty "Technological machines and equipment" in the following areas:

- metallurgical machinery and equipment;
- mining machines and equipment;

machinery and equipment for the oil and gas industry

Teaching students according to the educational program 6B07107 - Operational and service engineering is carried out at the Institute of Metallurgy and Industrial Engineering at the Department of Technological Machines, Transport and Logistics KazNTU named after K.I. Satpayev in accordance with licenses AB No. 0137395, issued on 03.02.2010. Ministry of Education and Science of the Republic of Kazakhstan. And license AB No. 0137395 dated 03.02.2010. (magistracy)

The training of specialists in this specialty is carried out on the basis of the state compulsory standard of higher education and the State compulsory standard of postgraduate education of the Republic of Kazakhstan No. 1080 of August 23, 2012.

According to the educational program "6B07107 - Operational and Service Engineering", the educational process is conducted according to the credit technology of education, the term of study is 4 years. Qualification - Bachelor, Engineering and Technology.

According to the educational program "7M07111 - Digital Engineering of Machines and Equipment", the educational process is conducted according to the credit technology of education, the term of study is 2 years. Qualification - Master of Engineering Science.

The educational program 6B07107 - Operational and Service Engineering in 2016 passed the accreditation assessment at the accreditation agency ASSIN.

Admission of students is carried out in accordance with the Rules for Admission to the Bachelor's Degree. The requirements for the minimum passing score based on the UNT and CT results for admission to a national university (70 points) are met.

The list of educational programs within the educational program is established by the Academic Council of the University independently in accordance with the Dublin descriptors, agreed with the European Qualifications Framework.

Training of specialists in the specialty 6B07107 - Operational and service engineering is carried out in accordance with the standard and experimental curricula of the specialty. The study of disciplines is based on the study of a cycle of general education, basic and specialized disciplines, which allow students to create the necessary knowledge base, improve their level of training, reveal their abilities and creative interest, allow to train specialists in the field of operation and maintenance of traditional and creation of new machines and equipment with modern knowledge

that can be in demand by society at industrial enterprises, research institutes, educational and scientific institutions.

The objectives of the educational programs for undergraduate 6B07107 - Operational and service engineering are:

Objective 1. Social, humanitarian and professional training of bachelors and masters in the field of mining and metallurgical and oil and gas industries in accordance with the development of science and technology, as well as changing needs, scientific and design centers, educational institutions in the personnel of this qualification.

Objective 2. Training of specialists who know the raw material base, production technology, have fundamental training in physics, mathematics, chemistry, physical and chemical foundations of technologies for the mining and metallurgical and oil and gas industries.

Objective 3. Provide knowledge, skills and abilities that allow analyzing problems in the field of professional activity and finding ways to solve them, solve engineering problems of designing technologies and equipment for an enterprise, conduct experimental research using information technology and mathematical modeling.

Objectives of the educational program:

- studying the cycle of general education disciplines to ensure social and humanitarian education based on the laws of the socio-economic development of society, history, modern information technologies, the state language, foreign and Russian languages;
- studying the cycle of basic disciplines to provide knowledge of natural science, general technical and economic disciplines, as the foundation of professional education;
- the cycle of major disciplines is focused on the study of key theoretical aspects of technological machines in general, theoretical and practical techniques, methods and methods of human activity aimed at creating competitive technological machines and based on the use of modern methods and design tools, mathematical, physical and computer modeling of technological processes and equipment;
- study of disciplines that form knowledge, skills and abilities of planning and organizing research, designing technologies and devices;
- familiarization with the technologies and equipment of enterprises during the period of various types of practices.

acquisition of skills and abilities in laboratory research, technological calculations, selection of equipment and design using modern computer technologies and programs.