

«Approve»

Director of Mining and Metallurgy  
Institute



Rysbekov K.

2022 year.

Protocol No 1 AC MMI

## **DEVELOPMENT PLAN**

EP "6B07304 – GEOSPATIAL DIGITAL ENGINEERING"

### **1 General information**

The EP "6B07304 – Geospatial Digital Engineering" was developed in accordance with the National Qualifications Framework, aligned with the Dublin Descriptors and the European Qualifications Framework, and designed based on a modular system for studying disciplines that form general cultural and professional competencies.

The individuality and uniqueness of the EP "6B07304 – Geospatial digital Engineering" consists in the formation of students' comprehensive competencies in the field of land management, cadastral accounting and legal regulation of land relations.

The program is aimed at training specialists capable of applying modern geographic information technologies (GIS), digital mapping methods, remote sensing of the Earth and automated cadastral accounting systems. Special attention is paid to the study of legal, economic and environmental aspects of land management, which allows graduates to work effectively in the field of land management, urban planning, agriculture and environmental management.

Thanks to a practice-oriented approach and cooperation with public and private structures, students acquire the necessary skills for professional activity, which increases their competitiveness in the labor market.

### **2 Educational program planning**

Planning and management of the educational program "6B07304 – Geospatial digital Engineering" is carried out on the basis of priority areas and strategic goals of K.I. Satpayev KazNTU (<https://official.satbayev.university/ru/university/mission-strategy> ) and the O.A. Baikonurov Mining and Metallurgical Institute, reflecting the vision, mission, strategic directions and key performance indicators (<https://official.satbayev.university/ru/mining-metallurgy>).

### **3 The purpose of EP development**

The purpose of the educational program is to train graduates as a competitive specialist in the field of land management and cadastre, with critical thinking, able to use theoretical and practical information to perform land management and cadastral work in the field of land

and real estate monitoring, cadastral and economic assessment of land and other real estate, and the regulatory framework for project development.

#### **4 Objectives of EP development**

4.1 Graduate's preparation for organizational activities that exclude negative phenomena in professional activities, the development of spiritual values, moral and ethical norms of a person as a member of society, the implementation of the legal and legislative system of the Republic of Kazakhstan with a high level of professional culture, civic position;

4.2 Preparing graduates for continuous self-improvement and self-development, mastering new knowledge, skills and abilities in innovative areas of land management and cadastre;

4.3 Graduate training based on the diversity and dynamism of the curriculum's catalog of elective subjects, with a predominance of practical skills in competencies, capable of performing professional functions within one or more types of activities based on the final learning outcomes that take into account the specifics of these types of activities, market requirements for organizational, managerial, and professional competencies;

4.4 Graduate training as a competitive specialist in the field of land management and cadastre, including on the basis of increasing the international aspect in educational and scientific programs, competent in the field of advanced technologies of land management and cadastre, and registration of research results.

5 A long-term action plan for the development and improvement of educational (educational work, educational and methodological work), scientific (research work, scientific and educational work, scientific and methodological work) and organizational and managerial activities for 2023-2027.

<b>Content of the event</b>	<b>Responsible executors</b>
Formation of a working group and commission for the development of an educational program development plan	Director of the Institute, Head of the Department, Teaching
staff Goals and objectives of the educational program development plan	Director of the Institute, Head of the Department, teaching
staff Updating and improving the content of the OP, including the name of disciplines that determine modern professional competencies of a specialist	Director of the Institute, Head of the Department, Teaching staff departments, teaching
staff Strengthening the material and technical base	Director of the Institute, Head of the Department, teaching
staff Strengthening career guidance, attracting applicants through tripartite agreements	PC, Directorate, Head of the Department, teaching

staff Involvement in the educational process of teaching staff from among business partners	Head. Department, teaching
staff Development and implementation of digital interactive forms of education, a combination of theoretical and practical methods and forms of training	Director of the Institute, Head of the Department, Teaching
Introduction of innovative educational technologies in the educational process	Director of the Institute, Head of the Department, Teaching
staff Provision of electronic educational materials, multimedia educational resources in all disciplines of the OP	Director of the Institute, Head of the Department, teaching
staff Ensuring the participation of teachers and students in interuniversity and international conferences	Director of the Institute, Head of the Department, teaching
Development of scientific schools, training of students	Director of the Institute, Head of the Department, teaching staff
Regular professional development of teaching staff	Director of the Institute, Head of the Department, teaching
staff Ensuring safe and comfortable working conditions, training and in non-academic settings Student Activities	Directorate, Head of the Department
of Corporate Culture	Development Director of the Institute, Head of the Department, Teaching staff

Reviewed at the meeting of the MSaG Department Protocol № 3 dated September «20», 2022.

Head of the Department of MSaG



Orynbasarova E.O.