8D07150 Electrical power engineering

PASSPORT of the EP

Nameofthe EP	8D07150 Electrical power engineering
Code and Classification of Education	8D07 Engineering, Manufacturing and Civil engineering
Code and Classification of Areas of Training	8D071 Engineering and Engineering Trades
Group of educational programs (EP)	D099 Energy and Electrical Engineering
Languagelearning	Kazakh, Russian
The complexity of EP	180 credits
Distinctivefeaturesof EP	-
PartnerUniversity (JEP) -	-
Purpose of the EP	Training of competent scientific and pedagogical personnel demonstrating systemic and strategic thinking based on a combination of knowledge, corporate intelligence and moral potential with practical skills in conducting research and managing energy production
Name of the degree awarded	Doctor of PhD
Field of professional activity	• production and technological activities in energy divisions;• organizational and managerial activities in the structural divisions of the Ministry of Education and Science, the Ministry of Energy, the Committee for Atomic and Energy Supervision and Control of the Ministry of Energy of the Republic of Kazakhstan; the Committee for Industrial Development, akimats;• research activities in the modern educational space, research institutions; • experimental research activities in the modern educational space, research centers, laboratories; • pedagogical activity in educational structures of higher educational institutions; • design and engineering activities in design, design organizations and in production without presenting work experience requirements in accordance with the qualification requirements of the Qualification Directory of positions of managers, specialists and other employees approved by the Order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated December 30, 2020 No. 553.

Purpose of the EP	**RE 1.** To present the results of research on current problems of the electric power industry in the form of publications and speeches at the national or international level, using the skills of scientific writing and scientific communication; **RE 2.** To implement and adjust the complex process of scientific, experimental and theoretical studies of the unstable state of the electric power complex using modern scientometry methods; **RE3**. Develop proposals for the effective operation of electrical complexes and systems based on methods for assessing the energy security of territories and modern approaches to managing intelligent energy systems; **RE 4**.Critically analyze various scientific theories, analytical and experimental scientific activities of planning and forecasting research results, using computer methods of statistical processing; **RE 5.** To conduct training and research based on modern digital technologies with the integration of education, science and innovation into professional, pedagogical and industrial activities; **RE 6**. Manage technical and technological processes of designing modern energy supply systems for local facilities, including the use of artificial intelligence **RE 7**. Optimise the operation of electric power facilities of intelligent information and communication technologies, methods of energy production, distribution and consumption, development of mathematical forecasting models based on artificial intelligence; **RE 8**. Manage innovative projects for the development of local energy supply systems with the identification of risks and energy security measures and the submission of reports on the results of innovative activities throughout the life cycle; **RE 9**. To present scientifically sound technical, economic and technological solutions, the implementation of which will make a significant contribution to the development of the country's electric power industry.