6B07150 Electric Power Engineering

**PASSPORT of the EP**

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| Name of the EP | 6В07150 Electroenergetics |
| Code and Classification of Education | 6В07 Engineering, Manufacturing and Civil Engineering |
| Code and Classification of Areas of Training | 6В071 Engineering and Engineering Trades |
| Group of educational programs (EP) | В062 Electrical Engineering and Energy |
| Language learning | Kazakh, Russian, English |
| The complexity of EP | 240 credits |
| Distinctive features of EP | - |
| Partner University (JEP) - | - |
| Purpose of the EP  | Preparation of highly qualified, competitive in the labor market specialists in the field of electric power industry, capable of self-development and the implementation of core activities according to the qualifications of a bachelor of engineering and technology. |
| Name of the degree awarded | «Bachelor of Engineering and Technology» |
| Field of professional activity | The sphere of professional activity is the field of science and technology, which includes a set of technologies, means, methods and methods of human activity aimed at creating conditions for the conversion of electrical energy and process control. |
| Learning out comes | **LO1**Communicate freely in a professional environment and society in Kazakh, Russian and English, applying  the principles of academic writing and the culture of  academic integrity.**LO2**Demonstrate natural science, mathematical, social, socio-economic and engineering knowledge in professional activities, based on methods of mathematical data processing, scientific and experimental research.**LO3** Apply information and digital literacy to analyze the information of electric power systems, setting goals and choosing ways to achieve it.**LO4**To develop models of electrical networks and systems, digital control systems of electric drive, using innovative programs and data of technological and structural properties of the studied and designed object.**LO5**To use modern methods of calculation of electromagnetic, electrophysical and transient processes for the selection of electrical equipment and relay protection in electric power systems.**LO6** Develop plans, programs and methods of installation, commissioning, operation, testing and modernization of electrical equipment and converter devices, diagnostic and repair works of electrical equipment, taking into account environmental, architectural and regulatory requirements.**LO7** To ensure the reliability of electric power systems and the quality of electricity by analyzing the functionality of local electrical systems, intelligent technologies and principles of modern design of electric power systems.**LO8**To develop a feasibility study of projects, applying the basic principles and mechanisms of functioning of the markets of electric energy and power, the market of system services with the efficiency of equipment operation and compliance with the rules and regulations of labor protection, engineering and fire safety.**LO9** To use research, entrepreneurial skills and skills of working in non-standard conditions.**LO 10**Demonstrate the skills of self-learning, self-education, a healthy lifestyle, teamwork. |