

DESCRIPTION OF THE EDUCATIONAL-PROFESSIONAL PROGRAM

Field of Knowledge 14 "Electrical Engineering"

Specialty 144 "Thermal Power Engineering"

Educational Program "Energy Management"

First (Bachelor's) level of higher education

Educational Qualification "Bachelor of Thermal Power Engineering"

Form of Study: Full-time/Part-time

Accreditation Status: Not accredited.

The Educational Program "Energy Management" of the first (Bachelor's) level of higher education in the specialty 144 "Thermal Power Engineering" is aimed at the formation and development of general and professional competencies in the field of electrical engineering, understanding the principles of energy conservation and implementation of effective energy management systems, increasing energy efficiency at enterprises, reducing energy supply costs and, consequently, reducing the impact of human activities on the environment.

The purpose of the educational program is to train a highly qualified, competitive specialist capable of solving complex general, specialized tasks and practical problems in the field of thermal power engineering and energy management, which involves the application of theories and methods of electrical engineering and is characterized by complexity and uncertainty of conditions.

Objectives of the Educational Program:

- Formation of fundamental knowledge in mathematics, physics, chemistry, which are the basis for further study of core disciplines;
- Providing theoretical knowledge in thermodynamics, fluid dynamics, heat and mass transfer, power plants and systems, alternative energy sources that form the basis of thermal power engineering;
- In-depth study of the principles and methods of energy management, energy auditing, energy conservation in various industries (heat supply, electricity supply, industry, buildings);
- Acquisition of practical skills in the design of energy-efficient systems and implementation of energy-saving measures;
- Familiarization with the regulatory framework governing the energy sector and energy efficiency issues;
- Development of abilities to analyze and evaluate energy consumption, develop and implement projects to improve energy efficiency;
- Development of communication skills, teamwork, and decision-making for effective energy management.