

Power Engineering

South Ural State University

Degree or qualification is awarded: **Bachelor's degree**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **no**

Price: **151 800 rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/bachelors-specialist-degree-programs/130302-power-engineering-and-electrical-engineering-1>

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Training of highly qualified holders of a Bachelor's degree in the field of automated electric drives capable of competing in the conditions of the modern market economy and digitalization of production.

Special attention is paid to studying of the theory and practice of electric drive and automation of mechanisms and technological complexes in various sectors of economy, their automation systems, control and diagnostics. These systems are in demand at any industrial enterprise, and also among the Department's objects of study are electric transport, robotics, agriculture and public utilities, instrumentation and machine tool industry, household appliances, etc.

Specializations within this programme

Electrical and electronic systems for ground vehicles

Power Engineering and Electrical Engineering (Electric Drive and Automation of Industrial Plants and Technological Complexes)

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Electric drive and automation of industrial installations and technological complexes

Power Engineering and Electrical Engineering (Electric Power Systems with Integrated Relay Protection and Automation)

A holder of a Bachelor's degree in the profile of electric power systems is in command of the knowledge of the processes of transmission, conversion and distribution of electricity, normal and emergency modes of operation of power electrical equipment, technical means of protection and automation of technological processes, dispatch control systems, methods of energy saving and improving reliability.

Classes under the programme are held in the functioning laboratories of high-voltage engineering and high-voltage equipment, relay protection and automation, dispatch control, mathematical modelling of power systems, electric power systems with power converting equipment. In the process of training, students receive knowledge focused on

the development and application of modern electricity transmission and distribution systems, the introduction of digital technologies in electrical networks, the use of microprocessor-based relay protection and automation devices, and the operation of all types of electrical equipment.

The training is held using a practice-oriented approach, while internship and pre-graduation practical training are carried out at enterprises of the Chelyabinsk Region with the ability to select relevant topics of course and diploma projects. This ensures 100% employment of the graduates at specialized enterprises in our region and beyond.

Power Engineering and Electrical Engineering (Power Supply Systems)

preservation and development of the Russian school for the training of qualified personnel in the electric power industry to design the power supply systems for various facilities, perform maintenance and operation of electrical equipment, and do research.