**Bachelor’s Degree Program**

**13.03.02 Power and Electrical Engineering**

**Field of study**: Electric Stations

**Program goals:** Bachelors able to operate successfully in the activities associated with the use of electric energy, the control of energy flows, development and manufacture of elements, devices and systems that implement these processes, posess universal and subject-specialized competencies, promote social mobility and stability in the job market.

**Duration of training:** Full-time form of training - 4 years, correspondence training - 5 years.

**Basic department**: Atomic Energy, **VETI NRNU MEPhI**.

**Field of professional activity:** a set of technical tools, methods and techniques of the production processes, transmission, distribution, conversion, application and management of electrical energy flows; development, manufacture and quality control of components, machines, devices, systems and components that implement the above-mentioned processes.

**Objects of professional activity:** electric power stations and substations; power systems and networks; urban power supply systems, industrial plants, agriculture, transport systems and facilities; installation of high voltage for different purposes, electrical insulating materials, structures and means of diagnostics, protection against lightning and surge, means of ensuring electromagnetic compatibility of equipment, high-voltage electrical technology; relay protection and automation of power systems, power plants, power plants and complexes based on renewable energy sources; electrical machines, transformers, electromechanical complexes and systems, including their management and control; electrical and electronic devices, systems and systems of electromechanical and electronic devices, automatic devices and flows of energy management systems, electromagnetic systems and mechanisms for devices, technological installations and electrical products, primary converters of measuring systems, industrial process control and management, electrical insulation electricity and electrical devices, wire and cable products, electrical capacitors, materials and electrical insulation systems of electrical machines, transformers, cables, capacitors; electric drive and automation of machinery and process systems in various industries; converting devices, electric energy, process and auxiliary facilities, their automation systems, control and diagnostics; electrical household and enterprise networks, organizations and institutions; low and high electrical voltage; potentially hazardous processes and production; methods and means of protection of human, industrial sites and habitat from human impacts.

**Curriculum features:** the main feature of the educational process is physical and mathematical and engineering trainig, which allows to master the main basic and special disciplines. Graduates of the training areas are ready for a wide range of applications such as design, construction, testing, commissioning, maintenance and repair companies, cities and power systems businesses.

**The list of enterprises for practical training and employment of graduates:** JSC «Concern Rosenergoatom» «Rostov Nuclear Power Plant", JSC "Concern Rosenergoatom" "Rostov Nuclear Power Plant", JSC "Concern Rosenergoatom" "Rostov nuclear power plant," Municipal unitary enterprise "Volgodonsk municipal electric network" (MUE VMEN), “Volgodonsk Interdistrict Electric Networks” the branch of JSC “Donenergo” (VIEN), LLC "LUKOIL-Rostovenergo", LLC "LUKOIL-Ekoenergo," “Atommash” the branch of JSC “AEM Technologies” (Volgodonsk), Rostov branch "Rostovatomtekhenergo" JSC "Atomtekhenergo," JSC "Concern Rosenergoatom" "Leningrad nuclear Power plant", JSC "Concern Rosenergoatom" "Smolensk nuclear Power plant", JSC "Concern Rosenergoatom" "Kalinin nuclear Power plant", JSC "Concern Rosenergoatom» «Novovoronezh nuclear Power plant", JSC "Concern Rosenergoatom" "Kursk nuclear Power plant ", “Donenergomontazh” the branch of CJSC “Sezam”, LLC Production and construction company "Universalstroy", "Polesie Ltd. ", JSC "NIAEP ", LLC "EnergomashKapital company", JSC Yugelektro."