**Bachelor’s Degree Program**

**13.03.03 Power Machinery**

**Field of study**: Boilers, Combustion Chambers, and Nuclear Steam Generators.

**Program goals:** training of bachelors able to operate successfully in the activities associated with the design, research, installation and operation of power machinery, machinery, plants and their management systems, based on work processes which put the various forms of energy conversion.

**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:** the design, the study of energy machines, machines, equipment and their management systems, based on work processes which put the various forms of energy conversion; installation and operation of power machinery, machinery, plants and their management systems, based on work processes which put the various forms of energy conversion.

**Objects of professional activity:** machines, plants, engines and machines for production, transformation and consumption of different forms of energy, including: steam and hot water boilers and waste heat boilers; steam generators; combustion chambers; nuclear reactors and power plants; steam and gas turbines and engines; steam turbines; combined installations; heat exchangers; hydraulic turbines and reversible hydraulic machines; power pumps; hydrodynamic transmissions; hydropneumatic units; hydraulic and pneumatic actuators; hydropneumosystems combined management of energy facilities; means of automation of power plants and systems; power plants based on alternative and renewable forms of energy; fans, blowers and compressors; actuators, energy systems and the operation of machinery controls, plants, engines, vehicles and complexes with various forms of energy conversion; accessories, allowing operation of energy facilities; technology and equipment for the power engineering industry.

**Curriculum features:** the main feature of the educational process is physical and mathematical and engineering training, 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 of electro-mechanical and power equipment industries.

**The list of enterprises for practical training and employment of graduates:**

“Atommash” the branch of JSC “AEM Technologies” (Volgodonsk), JSC «Concern Rosenergoatom» «Rostov nuclear power plant," Rostov branch "Rostoatomtekhenergo" JSC "Atomtekhenergo", LLC "Polesie", JSC "Volgodonsk plant of metallurgical and power equipment" , JSC "AEM-technology" "Petrozavodskmash", JSC "Atomenergomash", JSC "NIAEP", LLC "LUKOIL-Rostovenergo", “Donenergomontazh” the branch of CJSC “Sezam”, JSC "Atommashexport".