**Bachelor’s Degree Program**

**15.03.01 Mechanical Engineering**

**Field of study:** Equipment and Technology of Welding Production in Power Engineering.

**Program goals**: the formation of competencies that allow a graduate to carry out successfully production activities, aimed at creating a competitive product of mechanical engineering.

**Duration of training**: full-time form of training - 4 years; correspondence form of training - 5 years.

**Basic department**: Mechanical Engineering and Applied Mechanics, VETI NRNU MEPhI.

**Field of professional activity** of graduates who have mastered the Bachelor program includes:

- research, development and technologies aimed at the creation of competitive products of mechanical engineering and based on the use of modern methods and means of projecting, mathematical, physical and computer modeling of technological processes;

- organization and fulfillment of work on the creation, assembly, commissioning, maintenance, operation, diagnostics and repair of equipment in engineering production, on the development of technological processes of parts and components manufacturing.

**Objects of professional activity** of graduates who have mastered the undergraduate program are:

- mechanical engineering production facilities, technological and tool equipment;

- manufacturing processes, their development and mastering new technologies;

- normative and technical documentation, standardization and certification systems;

- development of industrial equipment and means of mechanization and automation processes in mechanical engineering;

- information tools, metrology, diagnostic and management software of technological systems to achieve the quality of manufactured products;

- methods and means of tests and quality control of mechanical engineering products.

**Curriculum features:** the curriculum includes disciplines, which guarantee graduate the successful development of all the necessary competences for qualified solution of modern engineering problems, aimed at creating competitive products. The main disciplines that ensure student profiling in accordance with this educational program are: "Welding Processes and Equipment", "Materials and Their Behavior While Welding", "Calculation and Design of Welded Joints", "Engineering Fabrication Support of Welded Structures", "Technical Standard Base of Welding Production" ,"Economics and Management of Mechanical Engineering Production" and others.

**The list of enterprises for practical training and employment of graduates:** “Atommash” the branch of JSC “AEM Technologies” (Volgodonsk), JSC "Atomenergomash", JSC "AEM-technology" "Petrozavodskmash", Federal State Unitary Enterprise "Russian Federal Nuclear Center, All-Russian Scientific Research Institute of experimental physics" (FSUE “RFNC-ASRIEPh”), JSC «Concern Rosenergoatom» “Rostov nuclear power plant", JSC "Concern Rosenergoatom" "Kalinin nuclear power plant", JSC "Volgodonsk plant of metallurgical and power equipment" (VPMPE Ltd.) LLC "Pobedit", LLC "Polesie", JSC "Atommashexport", LLC (Special Design and Technology Bureau) SDTB "Energomash".