**Abstract program**

**15.03.05 Design and technological support of machine-building production**

**Program name:** Engineering Technology

**The program's objectives**: preparation of bachelors in the field of mechanical engineering technology, having universal and professional competences, contributing to their social mobility and stability in the labor market.

**Training dates:** at the internal form of training - 4 years, with part-time and correspondence forms of education - 5 years.

**Graduate Departments:** department of the chair "Technology of mechanical engineering" of NTI NRNU MEPhI.

**The area of professional activity:**

- A set of tools, techniques and methods of operation, aimed at creating a competitive engineering products, improving national technological environment;

- Rationale, design, implementation and monitoring of the rules, regulations and requirements of engineering products of various official purposes, its production technology and quality assurance;

- The development of new and improvement of existing technological processes of manufacture of products of machine-building production, the means of their equipment;

- The creation of new and the use of modern means of automation, design methods, mathematical, physical and computer modeling of technological processes and engineering industries;

- Providing a highly efficient operation of technological processes of machine production, the means of their technological equipment, automation, control, monitoring, diagnostics, and product testing, market research in the field of engineering and technological support of machine-building production.

**Objects of professional activity:**

- Machine-building production, their main and supporting, equipment, systems, tool machinery, tooling, design tools, mechanization, automation and control;

- System engineering industries, providing pre-production, its management, metrology and maintenance, life safety, protection of the environment;

- Legal, technical and planning documents, standardization and certification system;

- Means and methods of testing and monitoring the quality of engineering products.

- Industrial and technological processes engineering industries, means of their technology, instrumentation, metrology, diagnostic, and management information software;

- Storage and transportation systems engineering industries.

**Types of professional activities,** which may be prepared graduates of undergraduate programs: design and engineering; organization and management; research and development; Special activities; production and technology.

**Features of the curriculum**: The curriculum provides all the necessary competencies for an in-depth study of techniques and patterns of design and technological design of automated machinery.

The curriculum provides three kinds of practices: learning (1 course - 2 weeks, 2 year - 3 weeks); Production (3 course - 3 weeks) and undergraduate (4 year).

**Bases practices for students** are the structural units of enterprises and organizations related to the engineering, instrument engineering, metallurgy (JSC Ural Electrochemical Integrated Plant, LLC "Uralpribor", LLC "Ural Plant of gas centrifuges", LLC "NNKTS" - Novouralsk, JSC RPK "Uralvagonzavod" JSC NTMK), JSC "Ural electromechanical plant" Ekaterinburg).