**15.03.05 Design and technology software engineering industries**

**Program Summary**

**Program title**: mechanical engineering

**Program goals**: training of bachelors in the field of special engineering for work at the pilot plant of the nuclear weapons complex (NWC); the acquisition of knowledge about the principles of functioning of technical objects, understanding the origin of these principles; the ability to acquire the theoretical and practical knowledge of their profession, methodology, technology and product design at a machine-building plant.

**Duration of full-time program** - 4 years; part-time form of training - 5 years.

**Department**: technology special SPTI mechanical engineering of NRNU MEPhI.

**Areas of expertise**: complex of means, ways and methods of activity aimed at the creation of competitive engineering products, improvement of the national technological environment; ensuring the effective functioning of technological processes of machine-building production, means of their technological equipment, systems of automation, control, control, diagnostics and product testing, market research in the field of design and technological ensuring of engineering industries.

**The objects of professional activity**: machining and machine-assembly production units of the RFNC VNIIEF, their main and auxiliary equipment, systems, tool machinery, tooling, design tools, mechanization, automation and management.

**Curriculum features**: the curriculum is built on the basis of NRNU MEPhI higher education standards taking into account the professional requirements of the RFNC VNIIEF. It includes the humanities, natural science and general technical disciplines in accordance with the requirements of the educational standards as well as special disciplines, the study of which is necessary for work at the RFNC, such as: Fundamentals of end-to-end design in engineering, Programming for CNC machines, as well as elective courses that include: NDT Methods, Design methodology, Design engineering, etc. Disciplines are taught by experienced teachers who have a scientific degree or are leading experts of the RFNC .

**List of companies for internship and graduate employment**: the main site of the plant of FSUE "RFNC-VNIIEF"