**140801.65 (14.05.04) Electronics and automation machinery of physical installations**

**Program Summary**

**Program title**: electronics and automation machinery of physical installations.

**Program goals**: professional training in the field of electronics and automation machinery of physical installations for research and production organizations of the nuclear and other high-tech industries, forming universal and specialized competencies that contribute to the social mobility and competitiveness of the graduates in the labour market.

**Duration of training**: full-time education is 5.5 years.

**Department**: Department of general technical disciplines and electronics of SPTI NRNU MEPhI.

**Areas of expertise**: research, design, expert, industrial-technological, organizational and management; research, development and technologies associated with designing, engineering, maintenance and operation of electronic equipment, information and measuring systems, automation machinery and control of nuclear installations, pulsed electrophysics systems, develop means to ensure their reliable and safe operation.

**Objects of professional activity**: physical installations and their safety systems, modern electronic and microelectronic circuitry, electronic instruments, electrical systems and equipment, equipment and systems of pulsed electrophysics, control systems, and automated control of nuclear and physical installations and their components, control systems, diagnostics, control and protection of physical installations.

**Curriculum features**: the curriculum complies with NRNU MEPhI higher education standards taking into account the requirements of Rosatom state corporation as the main employer of graduates. The educational trajectory specialist is formed with taking into account their interests. Core courses focus on the study of special courses and include studies of modern innovative methods of obtaining and processing information, developing, engineering and production technology of special physical installations, electronic devices and appliances and ensuring their safe operation.

Research work of students is carried out in close connection with the work conducted at the department and in the offices of the Russian federal nuclear center – VNIIEF.

Graduates of the department receive training aimed at solving a wide range of tasks in the interests of scientific research and production organizations of the nuclear and other high-tech industries.

**Enterprises for internship and employment of graduates**:

Russian Federal Nuclear Center VNIIEF; enterprises of Rosatom state corporation.