

Radiotechnics of physical facilities

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)

Degree or qualification is awarded: **Bachelor degree**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **yes**

Price: **80 860- 110 900 rubles per semester**

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Program goals: education of bachelors specialized in nuclear and radiation physics, familiar with nuclear materials operation and related technologies. Graduates have the broad range of general and special competences that give them an advance in social mobility.

Facilities of professional competence: charged particle accelerators, nuclear and physical facility electronic systems, nuclear physical facility automated control systems, medical radiation facilities, mathematical modelling of radiation propagation and interaction with matter study, environmental and ecological surveillance, nuclear materials, facilities and installations safety.

Education program features: Education is based on deep convergence of physics, mathematics and engineering. It allows students to master basic and special subjects. Educational and research activity of students is implemented in researches carried out either at department or at ROSATOM and Russian Academy of sciences institutions. Educational and research activity of students is implemented in researches carried out either at department or at ROSATOM and Russian Academy of sciences institutions. Graduates have all necessary skills of research and development of:

- radiofrequency generation, amplification and transmission systems,
- radiofrequency electronic measurement and control systems;
- codes for data storage and processing;
- computer simulation codes for physical phenomena and facilities study;
- automated control systems;
- computer-aided design systems.

Practice take place at: Students have practical studies at international and Russian scientific centers, Rosatom plants and institutions, Russian academy of sciences institutions.

Specializations within this programme

Nuclear physics and technologies

Professional skills and specialization areas: modern electronics, nuclear and electrophysical facilities electronic systems, automated control systems for nuclear reactors and nuclear physical facilities, ionizing radiation effect on human, environment and control electronics, mathematical modelling of radiation propagation and interaction with matter study, environmental and ecological surveillance, nuclear materials, facilities and installations safety.