

# Designing and operation of nuclear power plants

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)

Degree or qualification is awarded: **Specialist's degree**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **5,5 years**

Availability of free education: **no**

Price:

Programme webpage at the university website:

[http://eis.mephi.ru/AccGateway/index.aspx?report\\_url=/Accreditation/program\\_annotation\\_eng&report\\_param\\_pid=220&report\\_param\\_year=2016](http://eis.mephi.ru/AccGateway/index.aspx?report_url=/Accreditation/program_annotation_eng&report_param_pid=220&report_param_year=2016)

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**Graduation department:** Department of Thermal Physics (# 13)

**Objectives:** Training engineers able to work successfully in the sphere of activities related to the design, development and operation of nuclear power plants and other nuclear power plants, producing, transforming and utilizing thermal and nuclear power, including their constituent control, protection, management and ensuring nuclear and radiation safety.

The area of professional activity: a set of tools, techniques and methods of human activity related to the design, creation and operation of nuclear power plants and other nuclear power plants, producing, transforming and utilizing thermal and nuclear power, including their constituent control, protection, management and ensuring nuclear and radiation safety.

**Objects of professional activity:** nuclear physics, thermal hydraulic and electrical processes in the equipment and devices for the generation, transformation and use of nuclear and thermal power; Nuclear energy, thermo-mechanical and electrical equipment of nuclear power stations and other nuclear power plants; Process parameters monitoring, control, protection and diagnostics of nuclear power plants; Information and instrumentation and controls, control systems, control, protection, and security, software and hardware information and control systems for nuclear power plants, automated process control system of nuclear power plants; operational safety and radiation monitoring of nuclear facilities and installations; thermal power plants as objects of human activity associated with their creation and operation.

**Features of the curriculum:** The curriculum maintains the traditional principles of training of physicists and engineers of the department №13 includes basic physical and mathematical disciplines engineering disciplines. In addition, enhanced training in the theoretical and engineering disciplines, a significant amount presented special disciplines base chair. Graduates of the training areas are able to solve a wide range of tasks such as the development, construction, testing, commissioning, maintenance, operation and repair of equipment and systems, nuclear and thermal power stations.

The list of enterprises for practical training and employment of graduates: VNIIAES, Concern "Rosenregioatom", IPPE, OKB "GIDROPRESS", NIKIET.

**Specializations within this programme**