Computer Medical Systems

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)

Degree or qualification is awarded: Master degree

Language of study: **Russian** Mode of study: **full-time**

Duration: 2 years

Availability of free education: **yes**Price: **196 820 rubles per semester**

Programme curator: Valentin G. Nikitayev

Tel.: Contact name: Olga N. Petukhova, Phone number. +74957885699, ext. 8045.

E-mail: ONPetukhova@mephi.ru

Field of study: "Nuclear Physics And Technologies".

Duration of training: 2 years, 120 credits.

Course delivery language: russian.

Basic department: Computer Medical Systems (No. 46).

Program Manager: V. G. Nikitayev, Doctor of Technical Sciences, Professor, Head of Department.

The program is aimed at getting the second higher professional education with a Master Degree for professionals and bachelors in engineering and physics both immediately after the getting education at these levels, and after some years of practical work on speciality.

The feature of the program is the integration of the research fields of engineering and medicine. With theoretical study at lectures and practical trainings, practical skills develop in laboratory works at operating facilities of scientific and educational centers of MEPhl. Much attention is paid to self-dependent work, as well as to research work.

The curriculum provides in-depth study of specialized sections of disciplines. The professional cycle contains the following sections: image processing systems in medicine, recognition systems of medical research facilities, design of high-technology software and hardware systems of cancer diagnostics, methods and means of remote diagnosis and training; software network medical complexes; and physical methods of medical introscopy. Part of the curriculum is also implemented in English.

Elective courses are determined both by a student and by his/her potential employers.

Specializations within this programme

Nuclear physics and technologies

Objects of the professional activity of graduates with the speciality 140800.68 - "Nuclear Physics And Technologies" with program "Computer Medical Systems" include development and maintenance of high-tech hardware and software complexes of medical diagnosis and quality control systems of materials and products (including production of enterprises of the nuclear industry), creation of expert systems, decision support systems, and recognition systems.