03.04.02 Physics

Medical Physics of Radiation Diagnostics and Therapy

Department: "Medical Physics"

Program objective

The program "Radiotherapy and radiology" is dedicated for further professional activity of an individual in a team as radiation oncologists, radiologists and other specialists in cancer therapy and diagnosis.

During studies students are trying to:

- understand the laws of ionizing radiation interaction with matter and the biological effects of radiation at the cellular and organism levels;
- develop the ability to calculate and measure the dose distribution for various radiotherapy and radiology technologies
- develop the ability to create optimal radiation dosimetry plans;
- optimize radiological procedures for a specific patient.

Competitive advantages

- taking into account the latest recommendations of the IAEA and international organizations for medical physicists training + long-term training experience accumulated at MEPhI
- well-known scientists and as researchers as program professors
- practical training at leading oncological clinics and research medical organizations of Russia.

Practical training and employment opportunities

leading positions in medical and research organizations specializing in oncology and radiology:

- Russian Cancer Research Center
- Research Institute of Neurosurgery
- Moscow Research Institute of Oncology
- National Research Center "Kurchatov Institute"
- Research Institute of Emergency Children's Surgery and Traumatology and others.