

14.03.02 Nuclear Physics and Engineering

Nuclear Physics and Cosmophysics

Program objectives:

- sensitize bachelors about key topics of experimental nuclear physics and cosmic physics;
- sensitize the knowledge gained in the research work for improving experimental techniques in nuclear physics and cosmophysics;
- prepare and conduct physical experiments; analyze and interpret their results;
- solve fundamental problems of nuclear and particle physics.

Program curriculum

more than 60 courses that provide:

- basic physical and mathematical training
- theoretical and practical training in experimental nuclear physics and space physics

Curriculum subject areas

- experimental and measurement techniques
- methods for radiation detection
- detectors for particle physics
- nuclear electronics
- experimental data analysis and computer processing.

Professional activity

- research activity for cosmophysics and neutrino physics in space and on ground-based installations, fundamental interactions at particle accelerators;
- preparation and conduction of various experiments in nuclear physics and space physics (including design and construction of detectors of elementary particles and radiation);

- experimental data processing and analysis;
- theoretical predictions and experiment results interpretation of nuclear physics and space.