Applied Mathematics and Physics 03.04.01

Condensed Matter Physics

Program objective:

to train specialists with fundamental knowledge in the field of semiconductor physics.

This program focuses on the study of theoretical physics, modern methods of mathematical modeling of physical processes and participation in scientific research. Graduates work in leading Russian research centers and in foreign organizations, as well as make scientific reports at conferences of world universities.

Curriculum features:

- Solid state physics
- Numerical Methods and Mathematical Modeling
- C++
- Nanomaterials and nanotechnology
- Interaction of radiation with matter
- Coherent phenomena in electrodynamics
- Introduction to the physics of quark-gluon plasma
- X-ray radiation
- Asymptotic methods