Physics of Condensed States

Immanuel Kant Baltic Federal University

Degree or qualification is awarded: Master

Language of study: **Russian** Mode of study: **full-time** Duration: **2 years** Availability of free education: **yes** Price: **1 250 USD per year**

Programme webpage at the university website: <u>https://www.kantiana.ru/education/programms/</u>

Programme curator: **Burmistrov Valery Ivanovich** Tel.: **+74012338217** E-mail: VBurmistrov@kantiana.ru

The purpose of the Master's Program is to train highly qualified specialists for research and teaching in universities and institutes of Russian Academy of Sciences, as well as for high-tech industry, expertise and advisory activities.

The program focuses on training:

- highly qualified physicists specializing in the field of theoretical and experimental studies of crystalline and amorphous nature, inorganic and organic substances in solid and liquid states and change their physical properties under various external influences;
- theoretical and experimental study of the effects of various types of radiation (optical, radio frequency, X-ray) and the high-temperature plasma on the nature of changes in the physical properties of condensed matter;
- qualified physicists, capable of solving scientific and engineering problems in the development and study of the properties of new composite materials, micro and nanostructures, quantum liquids and glasses of different nature.

The main objectives of the implementation of the Master's Program in the field of personal development is the formation of social and personality traits: morality, common cultural skills, ability to rapid social adaptation and realization of the creative potential of personality, commitment, organization, hard work, responsibility, clear citizenship, communication and tolerance.

The main objectives of the implementation of the Master's Program in the field of training are:

- receive in-depth professional education in the field of physics, allowing free use of the competence of the graduate in the social, scientific research and professional fields;
- a graduate of the acquisition purpose and subject-specific competencies, contributing to its social mobility and competitiveness in the labor market;
- mastery of skills enables graduates to successfully work in scientific research institutes, universities and institutes of Russian Academy of Sciences, as well as knowledge-intensive production, in accordance with the profile oriented Master's Program;
- formation of skills to independently solve problems that require an innovative approach;
- development of skills to the study and implementation of innovations, the ability to find creative solutions.

Specializations within this programme