# Physics and Astronomy (Postgraduate)

Saint Petersburg Electrotechnical University "LETI"

Degree or qualification is awarded: PhD

Language of study: **Russian** Mode of study: **full-time** Duration: **4 years** Availability of free education: **yes** Price: **220 000 rubles per year** 

Programme webpage at the university website: <a href="https://etu.ru/en/study/post-graduate-study/03.06.01-physics-and-astronomy">https://etu.ru/en/study/post-graduate-study/03.06.01-physics-and-astronomy</a>

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Graduate department: Department of Physical Electronics and Technologies (FET), Department of Electrical acoustics and Ultrasonic Engineering (EUT), department micro and nanoelectronics (MNE)

## **Program purposes**

Main objective of training of graduate students is formation at them profound theoretical knowledge and practical skills in the field of physics and astronomy; and also skills of teaching activities for educational programs of the higher education.

#### Field of professional activity

The field of professional activity of the graduates who mastered the program of a postgraduate study includes the decision of professional tasks in the sphere of high technologies and physical education, enveloping set of tasks of theoretical, application-oriented physics and radio physics (according to a directivity of preparation) and also related natural-science subjects.

## **Objects of professional activity**

Objects of professional activity of the graduates who mastered the program of a postgraduate study are: physical phenomena, their general regularities and scientific tasks of interdisciplinary character; a research of the physical processes going in the nature and which are carried out in laboratory researches detection of the general regularities of their course and a possibility of control of them.

#### Features of the curriculum

The curriculum includes mastering of modern theoretical questions, practical training, doing of laboratory practical works on modern and unique equipment, conducting research in the form of classroom occupations and in the form of independent work. The central place in training of graduate students is research and preparation and defense of thesis, preparation of PhD thesis under the leadership of outstanding scientists participating in research projects in relevant areas of basic and applied researches, that allows to create at graduate students ability to work in research team, to generate new ideas and also to show skill of independent research. In the course of research graduate students acquire skills of search and analysis of scientific and technical information, learn current problems of development of science and technology, acquire skills of setting research problems, representation, approbation and protection of results of researches. Special attention is paid to training of compilation of reviews, reports and preparation of publications, implementations of results of researches.

## Specializations within this programme

**Radio** physics

Acoustics

Semiconductor physics