

# Computer and Information Sciences (Postgraduate)

Saint Petersburg Electrotechnical University "LETI"

Degree or qualification is awarded: **PhD**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **3 years**

Availability of free education: **yes**

Price: **220 000 rubles per year**

Programme webpage at the university website:

<https://etu.ru/ru/obrazovatel'naya-deyatelnost/aspirantura-i-doktornatura/>

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Graduate Department: Department of Software Engineering and Computer Applications

## **Program purposes**

Main objective of training is formation of theoretical knowledge and practical skills in the field of fundamental and applied mathematics, informatics, information technologies, mathematical simulation, creation of software systems, operating systems, databases, modern network technologies and skills of teaching activities in the field of fundamental and applied mathematics, informatics, information and communication technologies.

## **Field of professional activity**

The field of professional activity includes all set of objects, phenomena and processes of the real world: knowledge-intensive hi-tech productions of defensive industry, space complex, aircraft industry, mechanical engineering, design and creation of new materials, constructions, research and development and analytical centers of a different profile in research and production sphere, funds, insurance and management companies in social and economic sphere, financial organizations and business structures and educational organizations of higher education in social and economic sphere.

## **Objects of professional activity**

Objects of professional activity are concepts, hypotheses, theorems, physical and mathematical models, numerical algorithms and programs, methods of pilot study of materials properties and natural phenomena, physical and chemical processes making the maintenance of fundamental and applied mathematics, mechanics and other natural sciences.

## **Features of the curriculum**

The curriculum includes mastering of modern theoretical questions, practical training, making of laboratory practical works on modern and unique equipment, accomplishing of research in the form of classroom occupations and in the form of independent operation. The central place in training of graduate students is taken by research and development operation, preparation and protection of final qualification operation, preparation of the master's 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 the ability to work in research team, to generate new ideas and also to show skill of independent research and development operation. During the 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 of 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**

**System analysis, control and information processing**

**Elements and devices of an ADP equipment and management systems**

**Automation and control of technological processes and productions**

**Mathematical and software of computers, complexes and computer networks**

**Systems of design automation**