Electrical and Thermal Engineering (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:

https://etu.ru/en/study/post-graduate-study/13.06.01-electrical-and-thermal-engineering

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Graduate Department: Department of Robotics and Industrial Automation

Field of professional activity:

The field of professional activity includes: theoretical and pilot research, mathematical and computer simulation, constructioning and design, instruments, devices, installations, complexes of equipment of electro and heating assignment and set of technical means, methods and methods of human activities for production, distribution of electrical and thermal energy, to control of its flows and conversion of other types of energy to warmth; design, constructioning, creation, mounting and maintenance of electrical and electronic devices; maintenance of modern industrial enterprises, transport systems, thermal, gidro-and nuclear power plants, plants, power lines.

Objects of professional activity

Objects of professional activity are: thermal and nuclear power plants, systems of power supply of the enterprises, objects of small-scale power generation non-traditional power sources; power units, combined and gas-turbine cycle gas turbines; thermal pumps; fuel elements, installations of hydrogen power engineering; warm and mass-exchanged devices of different function; thermal and electrical networks; heat carriers and working bodies of power and heatfabrication systems; systems of standardization; systems and diagnostics of automated management of technological processes in power and power industry and the industrial enterprises.

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

Electrotechnical complexes and systems

Electrotechnics