

# **Mechatronics and Robotics (Bachelor)**

## **Saint Petersburg Electrotechnical University "LETI"**

Degree or qualification is awarded: **Bachelor**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **yes**

Price: **199 000 rubles per year**

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Mechatronics is one of the most popular technical trends today. At present, the creation of perspective developments is impossible without engineers who know this field. The mechatronic approach to design, studied in this program, permeates all key sectors of the real economy. This approach means the synergistic application of knowledge from four key areas: computer science, electrical engineering, mechanics, and control systems.

This department trains specialists in modern design, research, production, and operation of mechatronic and robotic systems. The program optimally balances subjects of theoretical and practical orientation. It includes a complex of subjects such as real-time operating systems, machine learning, computer vision, electric transport.

The training program is a balanced combination of the necessary theoretical aspects and modern practical skills for the future qualified specialist. Key disciplines such as real-time operating systems, machine learning, vision systems, electric transport, etc., are aimed at acquiring the knowledge that allows our students to participate in real-world research and development in mobile robotics already at the stage of thesis preparation.

Students who chose robotics as their training area participated in such research projects of the university as LETIGRA. The project is aimed at creating a platform for development, debugging, and research of algorithms for unmanned vehicle control. The project won first place at the Robocross 2018 contest. Today, students take part in research in the field of unmanned aerial vehicles, complex dynamic objects, and autonomous vehicles as part of the educational process and in close cooperation with faculty members.

Our undergraduate and graduate students have been participating in key national competitions in mobile robotics since 2017. Our teams won one gold and two bronze medals.

### **Specializations within this programme**