

# Electronics and Nanoelectronics

South Ural State University

Degree or qualification is awarded: **Diploma, bachelor's degree**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **yes**

Price: **151 800 rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/bachelors-specialist-degree-programs/110304-electronics-and-nanoelectronics>

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Students of 11.03.04 gain knowledge in modern areas of electronics development - micro- and nanoelectronics, as well as the use of computing and electronic equipment in the automation of production and communications. Graduates acquire fundamental knowledge of modern materials and components of electronic equipment, the physical principles of its work. Particular attention is paid to training in the field of digital and computer equipment, mathematical modelling, programming, design and production technology of electronic equipment. Training includes extensive laboratory training. Students gain skills in working with scientific and industrial equipment.

The acquired knowledge and skills allow graduates to successfully engage in the development, production, maintenance and operation of electronic devices of any complexity - smart sensors and flow meters, modern medical equipment, research equipment and others. The resulting mathematical and computer training allows you to engage in the development, maintenance, operation and examination of computer control systems at industrial enterprises. Extensive training of graduates in a foreign language is the key to working in international companies; it allows thorough understanding of the technical documentation.

The laboratories of the department are equipped with modern equipment necessary for holding workshops, working on term papers, writing theses and other scientific works. Theses are written on the subject of development of new electronic devices, the automation and computerization of production and technology, the solution of current scientific problems. Their results are often integrated into production processes and published in serious scientific journals.

Future graduate occupations: specialist in electronics, electronics engineer, electrical technician, microelectronics engineer, circuit engineer.

## Specializations within this programme

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