

Instrument Engineering

South Ural State University

Degree or qualification is awarded: **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/120301-instrumentation-engineering-information>

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Graduates will be able to develop and operate information-measuring devices and systems in relation to various sectors of the economy.

Students gain in-depth knowledge of:

- electrical engineering, electronics, digital circuitry;
- measuring equipment (digital measuring instruments, sensors of physical quantities and measuring intelligent systems);
- microprocessor technology and computer networks.

Specializations within this programme

Devices, systems and components instrumentation

Instrumentation Engineering (Information-Measuring Technology in Instrument Engineering)

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Information-measuring technologies in instrument engineering

Instrumentation Engineering (Instruments, Complexes and Element Base of Instrumentation Engineering)

Knowledge and skills gained by the graduates determine the field of future profession:

- mathematical modelling of the processes and objects of instrumentation and their study on the basis of standard software packages of computer-aided design and self-developed software products;
- measuring and studying various objects according to a given method;
- analyzing, calculating, designing and constructing in accordance with technical requirements of standard systems, instruments, components and nodes at the circuit and element levels;
- testing, adjustment of equipment, adjustment of software systems used for the development, production, and adjustment of instrumentation.

The uniqueness of the programme is in the development of the classical methodology for the design and construction of instruments and systems using CAD.