

Applied Mathematics

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: **126 900 rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/bachelors-specialist-degree-programs/applied-mathematics>

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The areas of professional competence of graduates includes the development and study of mathematical methods and models of objects, systems, processes and technologies intended for carrying out calculations, analysis and synthesis of technical objects and preparation of solutions in all spheres of production, economic, managerial activities, in science, technology and education based on modern software.

Specializations within this programme

Computer Simulation in Engineering and Technological Project Development

Graduates should be ready to solve the following professional tasks:

- Mathematical simulation of processes and objects using standard packets of computer-assisted project development and research;
- Analysis and formulation of solutions in specific subject areas;
- Debugging science-based software;
- Study of scientific and technological information, domestic and foreign experience in research;
- Preparation of initial data for the selection and validation of technological and organizational solutions based on economic analysis;
- Execution of experiments in the prescribed method, description of completed research and analysis of results;
- Creating a report on a completed task, participating in the implementation of the results of research and development.

Graduates can work as:

- Specialists, leading specialists, head engineer, program engineers in management organizations;
- In design organizations as developers of mathematical and computer models, mathematical programmers;
- In scientific organizations as researchers, lead engineers, mathematical programmers;
- In technological organizations as mathematical engineers, mathematical programmers, developer of mathematics and computer models or informational specialists;
- In industrial management organizations as mathematical programmers and informational specialists;
- In middle and higher education organizations as professors or assistants in the disciplines of mathematics and information;
- As system programmers, system administrators, network administrators.