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: **151 800 rub**

Programme webpage at the university website:
https://www.susu.ru/en/education/bachelors-specialist-degree-programs/010304-applied-mathematics-computer-modelling

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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.

The graduate is prepared to solve the following professional tasks:

- mathematical modelling of processes and objects on the basis of standard computer-aided design and research packages;
- debugging high-tech software;
- study of scientific and technical information, domestic and foreign experience on the subject of the study;
- preparation of initial data for the selection and justification of scientific, technical and organizational decisions based on economic analysis;
- conducting experiments according to a given methodology, compiling descriptions of the research and analysis of the results;
- preparation of a report on the assignment, participation in the implementation of research and development results.

Graduates can work:

- as a specialist, leading specialist, leading engineer, software engineer in organizational and management organizations;
- in project organizations as a developer of mathematical and computer models, as a mathematician-programmer;
- in research organizations as a research assistant, a leading engineer or a mathematician-programmer;
- in organizational and technological organizations as an engineer-mathematician, mathematician-programmer, developer of mathematical and computer models or an expert in computer science;
- in production and management organizations as a software mathematician and computer science specialist;
- as a system programmer, system administrator of computer networks.

Specializations within this programme

Computer Simulation in Engineering and Technological Project Development

Computer Modelling in Engineering and Technological Design

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