

# Applied Mathematics and Informatics

National Research Tomsk State University

Degree or qualification is awarded: **Bachelor**

Language of study: **Russian**

Mode of study:

Duration: **4 years**

Availability of free education: **no**

Price: **158 400 Rub per year**

Programme webpage at the university website: <http://www.fpmk.tsu.ru/node/835>

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The program provides training and research activities in a broad spectrum of applied mathematics, programming, information and communication technologies, computer systems and networks.

Graduates of the Bachelor's program in the field of Applied Mathematics and Informatics are highly qualified specialists in the field of IT technologies, ready for performing research activities using methods of applied mathematics and computer technologies; for development and application of modern mathematical methods and software for solving problems of science, technology and management; for using information technology in design, management and financial activities.

In the process of studying, students get deep theoretical knowledge in such basic disciplines as mathematical analysis, discrete mathematics, probability theory and mathematical statistics, equations of mathematical physics, optimization methods, programming languages and methods of translation, computer graphics, computer models and their application, administration of computer networks and systems, computer data analysis, which allows them to engage in practical work to modify proposed software projects and create new ones.

The success in professional activities in the field of computer technology is based on a combination of wholeness and versatility of mathematical models, the power of modern computer systems, the effectiveness of the latest information technology. Knowledge of IT technologies and rich practice of solving applied problems form highly skilled and demanded specialists who work effectively in scientific, design, engineering and technological organizations, commercial organizations and banks, industrial enterprises and higher education institutions. The introduction of information technology in all areas of modern society can predict the growth in demand for specialists of this profile and a high level of their wages.

Compared with the pure mathematician, the applied mathematician is more interested in problems coming from other fields. Compared with the engineer and the physical scientist, he or she is more concerned with the formulation of problems and the nature of solutions. Compared with the computer scientist, he or she is more concerned with the accuracy of approximations and the interpretation of results. Applied mathematics, by its very nature, has occupied a central position in this interplay and has remained a field of fascination and excitement for active minds

## **Specializations within this programme**