Applied Mathematics and Informatics

Peter the Great St. Petersburg Polytechnic University

Degree or qualification is awarded: Bachelor of Applied Mathematics and Informatics

Language of study: **Russian** Mode of study: **full-time** Duration: **4 years** Availability of free education: **yes** Price: **198 000 - 207 000 rubles**

Programme curator: **Mr. Roman Filippov** Tel.: +7(812) 552-65-08 E-mail: <u>rmnfilippov@gmail.com</u>

The Applied Mathematics department trains specialists with deep knowledge of both classical and modern branches of mathematics combined with algorithms, methods and software development skills. The real separation of undergraduate specializations occurs after 2 years of general education with a focus on the study of fundamental disciplines and programming subjects. This approach provides students with the opportunity to choose the educational path for the 3rd and 4th years of studies within the scope of the following specializations: mathematical modeling, software engineering, mathematics and informatics in economics, and bioinformatics with further transition to master's programs with the same names.

Specializations within this programme

Mathematical modeling

Program description:

Master program provides advanced education in applied and computational mathematics. It is focused on solving problems of mathematical physics, mechanics of solids and fluids, and development of reliable numerical algorithms in fundamental research and industrial applications using the modern theory of computational experiment and various computer technologies.

Software Engineering

Master program is based on applied mathematics. It provides necessary skills in theoretical and applied computer science, design and implementation of software systems, analysis of the functioning of computer systems.

Mathematics and informatics in economics

Master program provides advanced fundamental education in applied mathematics and computer science. The main skills of students are application and development of mathematical methods and software for solving real-life problems, design and use of informational technologies in economics.

Bioinformatics

Master program provides students with fundamental theoretical knowledge and broad portfolio of practical skills through taught modules covering subjects such as statistics, machine learning, molecular biology, optimal control, bioinformatics, nonlinear dynamical systems, systems biology, internet technologies, parallel computing. Along this, master students will also undertake projects and work on research problems that will have a strong emphasis on applied questions and practical approaches of agrobiology and medicine, and will be linked to real-world problems and experiences from our external collaborative partners.