

Annotation

PhD program "Computational Mathematics"

Objective of the program: The PhD program in Computational Mathematics aims to prepare highly qualified specialists in the field of mathematics who can apply their knowledge and skills in various scientific and applied fields. The program is designed to develop research skills, critical thinking, and the ability to solve complex problems through the application of modern mathematical and programming methods and techniques.

Main highlights:

- Development and analysis of mathematical models and computer algorithms for effective solution of elliptic and parabolic problems with a very large number of parameters (large-scale and ultra-scale problems).
- Use of modern mathematical and software tools and software for error analysis, convergence of iterative mathematical models, efficiency and complexity of algorithms.
- Application of computational mathematics in various scientific disciplines such as mathematical modeling, mechanics, mathematical physics, mathematical biology, high-performance computing, etc.
- Development of interdisciplinary research skills and cooperation with other scientific fields.

Forms of education: Full-time (up to 3 years), part-time (up to 4 years), self-study (up to 5 years), PhD project (full-time, part-time or self-study).