**Division**: Institute of Natural Sciences and Mathematics, Department of Mathematical and Computer Modelling

Academic programme: 01.04.05 Statistics, Statistical and Computer Modelling

Mode of study: full-time/part-time

**Programme length**: 2 years and 3 month

Programme level: Master's degree

**Language of instruction:** Russian

Programme description: Graduates will learn how to:

- formalize the initial problem, build a statistical model and check its adequacy;
- effectively use statistical and mathematical packages;
- create efficient computer implementations of statistical methods for solving practical problems;
- develop known and create new statistical methods of data processing.

The field of professional activity of graduates who have mastered the master's programme includes the activities of such organizations as:

- Federal State Statistics Service and its territorial bodies;
- subjects of official statistical accounting;
- state and municipal administration bodies;
- academic, departmental and non-state scientific organizations;
- international and non-governmental organizations established on the basis of international agreements that collect, process, systematize and summarize statistical data of a social, economic, humanitarian and other nature in the areas within their competence;
- organizations of various types of activities and forms of ownership that collect, process, systematize and summarize mass information about the state and development of natural, humanitarian (social, economic, demographic and others), technical and medical processes and phenomena, their statistical analysis and modelling.

## Main programme-specific classes:

- Regional Statistics
- Statistics of Stationary Processes
- International Statistics
- Decision-making Theory
- Research on Statistical Economic Models Using the 1C System

- Research on Statistical Technical Models Using the 1C System
- Analytical Methods for Solving Multicriteria Problems
- Parallel Programming of Statistical Problems
- Statistical Methods and Forecasting Models
- Modern Problems of Statistical Modelling
- *Introduction to the 1C System Configuration*
- Application Packages
- Theory of Queuing Systems
- Applications of Econometrics in Engineering, Economics and Logistics
- Applied Regression Analysis
- Statistical Methods in Risk Assessment
- Multivariate Data Analysis
- Modern Mathematical Models of Economic Theory

**Programme manager**: Sofia A. Zagrebina, Doctor of Sciences (Physics and Mathematics), Professor, Head of the Department of Mathematical and Computer Modelling