

Complex Analysis

Siberian Federal University

Degree or qualification is awarded: **Master of Science (Mathematics)**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **166 246 RUB per year**

Programme webpage at the university website: <http://www.sfu-kras.ru/en/masters/complex>

The aim

The program aims to introduce students to the concepts and methods of complex analysis in several variables, an active area of mathematics that has deep connections with algebraic geometry, mathematical physics, and others. The fundamentals of complex analysis are developed through the systematic study of geometry of complex space and multidimensional integral representations which, in combination with methods of algebraic and tropical geometry, present a powerful tool of contemporary mathematical research in different areas: from PDE and difference equations to algebraic and hypergeometric functions.

Objectives

- To give students an appreciation of complex analysis and how this subject fits into mathematics.
- To ensure students know the fundamentals of complex analysis in several variables.
- To provide students with the opportunity to develop academic and research skills.
- To make students familiar with the connections complex analysis has with other fields of mathematics and physics.
- To enable students to experience of conducting guided research.

Learning outcomes

On completion of this program, it is expected that students will be able to:

- recall complex analysis terminology, basic definitions and statements;
- recognize the problems the complex analytic methods may be used to solve;
- identify the knowledge required for solving a problem;
- select and employ appropriate methods for analyzing problems in complex analysis;
- prove rigorously mathematical statements and formulate precise mathematical arguments.

Diploma and degree: MSc in Mathematics

Career prospects

Career opportunities: with a Master's degree in Mathematics you can obtain a position in both public and private sector related to analysis of information.

Research career: the Master's degree holder can continue studying to earn a PhD SibFU degree or Cand. Sc. in Mathematics degree.

Specializations within this programme