Analysis on Manifolds

Kazan (Volga Region) Federal University

Degree or qualification is awarded: **Master**

Language of study: **Russian** Mode of study: **full-time**

Duration: 2 years

Availability of free education: **no** Price: **168 960 RUB per year**

Programme webpage at the university website: https://kpfu.ru/eng/academic-units/physics-mathematics-and-it/limm

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The goals of implementation of the study programme «Analysis on Manifolds» in the field of study of «Mathematics» (01.04.01) are:

- formation of students' mathematical culture, fundamental training of students in the field of Mathematical, Functional Analysis, studies of modern apparatus of the Theory of Functions of a Complex Variable, Noncommutative Analysis and Algebra for further use in other areas of mathematical and natural sciences and disciplines;
- training Master's degree students capable of solving research problems in the field of Algebra and Mathematical Logic using the latest information technologies;
- development of students' personal qualities, formation of general cultural and professional competencies, knowledge and ability to apply them in their work activities.

Teachers teach disciplines, which are close to their scientific interests, thus, their research activity merges with the pedagogical one. The requirement to combine research activity with pedagogical one is found in the accreditation indicator of academic degree holders rate (the national requirement for a Master's degree is at least 80%). The requirement for teachers is continuous improvement and professional development, which is possible only with their active participation in methodological and scientific conferences, in cooperation with leading Russian and foreign colleagues.

The graduation departments are actively engaged in the research in the following fields: algebra and algebraic structures of algorithmic nature, local theory of degrees of unsolvability, Lie algebra, special classes of rings and modules, semirings and semimodules, theory of operads. Within the Master's programme, elective disciplines are delivered covering the outcomes of the current scientific research in the above areas. The leading teachers of the department supervise students' final qualification papers in the above areas.

The study programme are closely linked with the scientific research. The outcomes of scientific research are included in the content of the study programme courses. Master's degree students participate in scientific seminars in Geometric Theory of Functions of a Complex Variable, Von Neumann Algebras, in the work of post-graduates' seminars. The subjects of the courses are related to the scientific interests of the leading scientists of the Institute. Scientific achievements of the Master's degree students are presented at the annual All-Russian scientific schools-conferences "Lobachevsky Readings", at the final scientific conferences of students of KFU. Students solve the applied statistical problems while studying the course of Theory of Probability and Mathematical Statistics.

Specializations within this programme