Translational Chemical and Biomedical Technologies

National Research Tomsk State University

Degree or qualification is awarded: **Master's degree**

Language of study: **Russian**
Mode of study: **full-time, distance learning**
Duration: **2 years**
Availability of free education: **no**
Price: **201 500 RUB per year**

Programme webpage at the university website: http://ltcmb.tsu.ru/study/magisterskaya-programma/

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This Master's Program reflects the interdisciplinary nature of the results of the developing chemical disciplines with an emphasis on further application in biomedical sphere. The program implies combining chemical and biotechnological approaches to the development and application of new chemical substances, biomedical materials and modern diagnostic and therapeutic methods. The program provides the students with knowledge of modern methods of chemical synthesis for new materials, Genetic Engineering, Cell and Molecular Biology, Protein Biochemistry, Immunology, Confocal and Quantitative Microscopy, Chromatography, Clinical Research, Bioinformatics and Systems Biology, and other innovative research areas.

Key disciplines:

- Methods of teaching chemistry in high school.
- History and Methodology of Chemistry.
- Fundamentals of biochemical technology. Introduction to the science of polymers and biocompatible composite materials.
- Physicochemical properties of biocompatible materials based on polymers and methods of diagnosis.
- Basics of Pharmacology.
- Chemical methods of obtaining biologically active compounds and industrial synthesis of biomedical materials.
- Fundamentals of Immunology.
- Modern methods of assessing the pharmacological activity of chemicals.
- Fundamentals of biometrics etc.

Admission.

Admission to the first year of the Master's program is conducted on a competitive basis according to the entrance examinations: an examination in chemistry, an interview.

Specializations within this programme