

Biotechnology

South Ural State University

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

Language of study: **English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **no**

Price: **161 600 rubles**

Programme webpage at the university website:

<https://www.susu.ru/ru/190401-biotechnology-industrial-and-environmental-biotechnology>

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Within the life sciences, biotechnology is a fast growing trend. In the near future, biotechnology will become a key engine in various sectors of the global economy, from agriculture and the environment to industrial technology and energy.

This master's course is designed to provide the learning and development of the necessary competencies and practical skills that will ensure the demand for highly qualified scientists in the growing and global biosciences sector. The knowledge and practical experience gained in the program's courses will be applied to a wide range of careers.

The course is designed to provide a solid foundation in basic biotechnology and specialized training in industrial, environmental and enzymatic biotechnology with the opportunity to complete a research project in one of these areas.

The program is built on a modular type and covers the main topics of modern industrial biotechnology and laboratory practice within the framework of the possibility of forming an individual educational course:

- Biosynthesis of food ingredients
- Applied biocatalysis and biotransformation
- Bioinformatics and bioprocess modeling
- Industrial and environmental safety
- Integrated water treatment and management
- Innovative technologies of eco-materials
- Bioconversion and bioremediation

This course is specifically designed to equip you with the biotechnology skills and knowledge you need for a career in solving global environmental and industrial challenges around the world. Many of our graduates are employed by companies in the biotech industry where they can participate in medical, industrial or agricultural biotechnology research. They can also work on research projects in Contract Research Organizations (CROs) or academic departments of universities.

An unique educational environment is implemented on the basis of close scientific cooperation with international and Russian partners, including the Technology Institute of Warangal (India), University of Melbourne (Australia), Shenyang Institute of Technology (China).

Specializations within this programme

Biotechnology. Industrial and Environmental Biotechnology

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