

Chemical Technology

South Ural State University

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

Language of study: **Russian**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **no**

Price: **161 600 Russian rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/masters-degree-programs/180402-energy-and-resource-conservation-processes-chemical>

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- Each undergraduate performs work in the direction associated with the subsequent professional occupation.
- Participation in international programs: with the Lappeenranta University of Technology (Finland, double degree), Radboud University in Nijmegen (Netherlands, training included), University of Shanghai Cooperation Organization (joint university of SCO countries, training included);
- Work in scientific groups with developed international contacts, full-time participation in foreign scientific conferences, participation in national and international scientific projects, the possibility of training at leading international laboratories.

Professional competencies of the graduates:

- Chemicals, materials and their impact on the environment.
- Methods and tools for pollution control of gas, solid and liquid components of production and the environment.
- Production and research of new types of catalysts for use in water and air purification processes and industrial chemical reactions.
- Equipment, technological processes and industrial systems for the production of substances and materials related to petrochemistry and biotechnology.
- Methods and means of protecting the environment from human impact.
- Waste disposal and recycling systems.

Areas of research:

- theory of catalytic and sorption processes; development of new types of nanostructured inorganic functional materials for industrial chemical reactions, purification of natural and industrial wastewater, extraction of valuable components;
- development of technologies for purification of natural and industrial wastewater, industrial waste gases, disposal of solid waste;
- environmental management and environmental auditing in the interests of sustainable economic development.

Specializations within this programme

Energy and Resource Conservation Processes in Chemical Technology, Petrochemistry and Biotechnology

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