

# Energy- and Resource Saving Processes in Chemical Technology, Petroleum Chemistry and Biotechnology

National Research ITMO University

Degree or qualification is awarded: **M.S. in Energy and Resource Saving Processes in Chemical Engineering, Petroleum Chemistry and Biotechnology**

Language of study: **Russian, English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **262 000 RUB per year**

Programme curator: **ITMO International Admission Office**

Tel.:

E-mail: [international@itmo.ru](mailto:international@itmo.ru)

This program includes the expanded block of natural science subjects. Students gain their knowledge in the field of mathematics, computer science, physics, general and inorganic chemistry, organic chemistry, physical and chemical methods of analysis, colloidal chemistry, physical chemistry, ecology, etc.

## Specializations within this programme

### Industrial Ecology

#### PROGRAM DESCRIPTION

This corporate International Master's program allows students to acquire professional knowledge and skills in introducing the concepts of industrial ecology, industrial symbiosis and cleaner production for prevention of environmental pollution and sustainable consumption of energy and other natural resources.

Starting from the second semester, students can choose between the following specializations:

- Industrial Ecology (in Russian)
- Cleaner Production (in English)
- Integrated Management (in Russian, English, and German, implemented in collaboration with Zittau/Görlitz University of Applied Sciences, Germany)
- Environmental Design (in Russian and English)

**Read more about this International Master's Program [here](#).**

### Bioeconomics and Resource Management

#### PROGRAM DESCRIPTION

Implemented on the basis of ITMO University's state-of-the-art Bioengineering Center, the program focuses on training highly qualified specialists in the field of energy- and resource-efficient processes in chemical technology, petroleum chemistry and biotechnology using green chemistry technologies.

Apart from their main specialization, students have the opportunity to add an additional one to their curriculum and receive two diplomas in the subject areas "Energy- and Resource-Saving Processes in Chemical Technology, Petroleum Chemistry and Biotechnology" and "Economics". The curriculum combines fundamental and practical training in the field of information technologies and modeling, ecology and physicochemical analysis methods, recycling and disposal of materials, nanotechnologies, and general chemical technology.

## **Contacts**

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