



*Field of Study:* **Power and Resource-saving Processes in Chemical Technology, Petrochemistry and Biotechnology**  
*Major:* **Basic Processes of Chemical Productions and Chemical Cybernetics**

Ivanovo State University of Chemistry and Technology, Russia  
isuct.ru | vk.com/isuct | instagram.com/isuct.ivanovo

<b>Awarded degree or qualification:</b>	Bachelor
<b>Language of instruction:</b>	Russian (Preparatory Department for studying Russian language is available)
<b>Form of training:</b>	Full-time
<b>Duration:</b>	4 years
<b>Possibility of free training:</b>	Yes (see more)
<b>Contacts:</b>	international@isuct.ru +7 920 372 69 78    +7 4932 30 09 60

## 1. Programme description

Modern production all over the world cannot exist without equipment and devices that carry out various technological processes. There are processes that occur in completely different branches of technology such as mixing, filtering, heating, drying, etc. These processes have the same physical and physical-chemical basis regardless of the interacting substances properties.

Therefore, the methods of analysis, calculations and apparatus design are also similar. Specialists aware and skilled in the main processes and devices of chemical productions are in demand nowadays. This programme corresponds to the one of "Chemical Engineering" in all technical universities around the world.

The educational programme provides training specialists for chemical and related industries as well as engineers in the field of power and resource-saving and in environmentally friendly technologies. The training programme provides professional skills in various fields, in particular, in the field of power and resource-saving technologies, ecology, physics, nanotechnology, and mathematics.

## 2. Programme objectives

The graduate will be able to perform the following tasks:

- to organize the maintenance and control of technological processes;
- to participate in the operation of technological processes automated control systems;
- to control the quality of products and resources and power consumption of the technological processes using standard methods;
- to organize input control of the raw materials based on power and resource saving during their processing;



*Field of Study:* **Power and Resource-saving Processes in Chemical Technology, Petrochemistry and Biotechnology**  
*Major:* **Basic Processes of Chemical Productions and Chemical Cybernetics**

Ivanovo State University of Chemistry and Technology, Russia  
isuct.ru | vk.com/isuct | instagram.com/isuct.ivanovo

- to take part in the development of process controlling systems;
- to perform mathematical modeling of technological processes.

### **3. The field of professional activity of graduates**

The professional activity of the graduates is focused on implementing modern technologies in chemical, petrochemical and biotechnological industries.

The graduate will be able to carry out professional activities at industrial enterprises and research organizations engaged in the design, implementation and operation of the technologies in the basic inorganic substances production, basic and fine organic synthesis products, polymer materials, oil products, gas and solid fuel, microbiological synthesis, medicines and food products.

### **4. The educational programme trains:**

- technologists and managers in the field of technological processes,
- engineers and researchers,
- design engineers.

Students enrolled in this program will become successful specialists in various industries.

### **5. Major disciplines:**

"Processes and Apparatuses of Chemical Technology"

"Oil Refining Processes and Apparatuses"

"Environmental Protection Processes and Apparatuses"

"Principles of Mathematical Modeling of Chemical and Technological Systems"

"Theoretical Foundations of Power and Resource Saving"

"Technologies and Equipment of the Industry"