



## LEARNING AND STUDENTS

### Study programs

INRTU has various undergraduate and postgraduate programs aimed at solving the problem of climate change by transforming traditional sectors of the economy and developing "green" technologies and equipment.

Such programs include [Environmental Science Engineering](#) (Bs), Ecology and Green Engineering (Ms), [Environmental Safety](#) (Bs), [Renewable Energy](#) (Ms) and etc.

### Student initiatives

INRTU students eagerly address climate change issues and participate in different research projects. INRTU and Polyus Company held a joint forum "Conscious Industrial Ecology". Students worked on recycling and disposal of tires weighing up to three tons, renewable energy, and reducing harmful air emissions.



### Double-degree programs

INRTU delivers educational programs in Ecology jointly with foreign partner universities. These are double degree programs (2+2) or (1+1), and students study at INRTU and a partner university accordingly and obtain a degree from both universities.

The Bachelor's double degree program in Sustainable Innovative Economics is delivered jointly with Shandong University (China).

The Master's program in Electrical and Power Engineering is delivered jointly with the Otto-von-Guericke University (Magdeburg, Germany).

## RESEARCH

10 publications in Scopus in 2022

## PUBLIC ENGAGEMENT

### Scientific and Educational Center "Baikal"

Since 2021 Scientific and Educational Center "Baikal" unites the efforts of science, universities and business to expand research and development, introduction of new technologies to reduce the environmental impact on the Baikal natural area and conservation of natural resources.



**BAIKAL**

Scientific and Educational Center

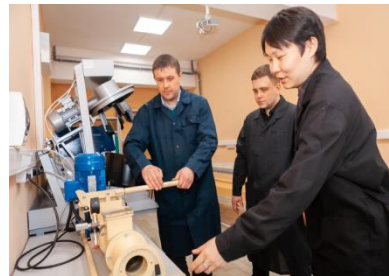
INRTU academics contribute to solving regional environmental problems and work on development of different green technologies for local enterprises to reduce ecological impact.

One of such green collaboration is the joint project of INRTU and Irkutsk Oil Company, dedicated to microbiological processing of food waste and sawmill waste.

As the result waste composting will be appropriate for use in Siberian climatic conditions.

### Leading Green Technologies

As a participant of Scientific and Educational Center Baikal INRTU became one of the winners of federal grant to purchase research equipment to study ceramics and concrete produced from ash wastes. INRTU researchers developed a project that allows using ash-and-slag mixtures as a strategically important raw material for production of cement, heavy concrete, ash ceramics. The ash-and-slag mixtures can be used for building, and allows competent utilization of waste.



## OPERATIONS

### Net zero plan

The University has developed [an action plan to achieve zero carbon emissions](#) for 2020-2050. It is planned to reduce direct greenhouse gas emissions that are generated from sources owned or controlled by the university by 2030. Reduction of indirect greenhouse gas emissions associated with the production of electricity, heat or steam purchased by the university will be achieved by 2040.



### Steps towards zero emission

To reduce greenhouse gas emissions INRTU implements the action plan:

1. Utilization of renewable energy sources for electricity generation, which reduces purchased electricity.
2. Private car parking fee to reduce the number of vehicles on campus.
3. Provision of discounted public transportation passes.
4. Increasing the quantity of parking lots for bicycles and electric scooters
5. Supporting city initiatives to develop bicycle and pedestrian traffic in Irkutsk
6. Participation in remote and online events.