09.03.02
INFORMATION TECHNOLOGIES IN EARTH AND ENVIRONMENTAL SCIENCES

DURATION:

4 YEARS

MODE OF STUDY:

FULL-TIME

LANGUAGE OF INSTRUCTION:

ENGLISH

AREAS OF STUDY:

EARTH SCIENCES, INFORMATION TECHNOLOGIES, ENGINEERING STUDIES

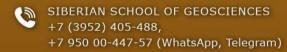
ENTRANCE EXAMINATION:

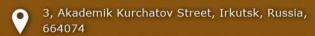
RUSSIAN, MATHEMATICS, PHYSICS/COMPUTER SCIENCE

ABOUT PROGRAM

The program is based on more than 25 years of INRTU experience in training specialists who are equally well versed in modern digital reality and natural processes and phenomena.









CURRICULUM:

General Geology

Mineral Deposits

Object-oriented programming

Geostatistics

Geoecology

Hydrogeology and Engineering Geology

Information system design

Petroleum Geology

Comprehensive interpretation of geological, geophysical and geochemical data



PROGRAM DIRECTOR



Alexander Parshin

PhD in Geology and Mineralogy, professor

Scientific Director of the Siberian School of Geosciences

Here, you will not only learn theory well, but how to work for real.



PROGRAM BENEFITS:

From the first year, students will be engaged in

- · relevant research;
- development of new technologies, IT-products, and robotic systems;
- · part-time job during academic year;
- · commercial projects on a paid basis in the summer.

The acquired knowledge allows graduates to work in a variety of fields, including

- · geological exploration and mining;
- · environmental protection;
- development or administration of new software or hardware systems, networks, spatial data infrastructure.

Graduates will be able to work effectively with data and offer solutions in the most financially secure sectors of the economy related to natural resources, comparing favorably with the graduates who have only completed training in IT.

SKILLS



Basic knowledge in geosciences, sufficient for independent practical activities



Practical skills in development and application of unmanned air and water systems in geosciences



Programming in high-level languages

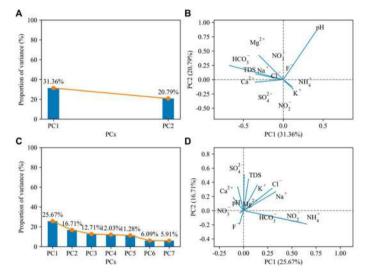


Theory and practice in environmental research and ecological monitoring



Basics of designing electronic equipment and robotic systems

INRTU guarantees that students of this program will not only receive a good IT and natural science education, but also a unique life experience. They will be able to see the most interesting places on Earth, take part in the best scientific conferences in Russia and the world, and offer their solutions to the most reputable experts. This program is a small life full of adventures.





Universal and mining GIS (QGIS, ArcGIS, MapInfo, Micromine)



Theory and practice of geological prospecting



Mathematical and geostatistical data analysis



AI fundamentals



3D modeling of the geological environment