

21.05.02 APPLIED GEOLOGY

(WITH THE ASSIGNMENT OF A QUALIFICATION IN THE SPECIALTY OF GEOLOGICAL EXPLORATION TECHNOLOGY)

Geology students receive two qualifications at once without additional payments or an increase in the duration of their studies.

Since 2024, the Ukhta State Technical University has opened the program 21.05.02 Applied Geology (with assignment of a qualification in the specialty Geological Exploration Technology) - you can get 2 qualifications during the standard period of study for a specialist degree. The program received support from PJSC Gazprom.

Two unique, in-demand specialties can be obtained in one period of study.

Duration of study: 5 years.

Number of seats:

25 budget places for full-time education,

5 places under the agreement on the provision of paid educational services of full-time education

List of entrance examinations

Based on 11 classes

1. Mathematics (profile) (40)
2. Russian language (40)
3. Elective: Physics (39), Chemistry (39), Computer Science and ICT (44), Geography (40)

Based on open source software

1. Fundamentals of Mathematical Methods in Technical Sciences
2. Basics of Mechanics
3. Russian language

Applied Geology

Oil and gas geology is a branch of geology that can be defined as "the science of finding oil and gas deposits," although geologists often work on the development of such deposits after their discovery, conducting detailed studies of deposits in their natural state and during development to assess their national economic significance and the most complete and rational use of the subsoil.

Mining engineers-geologists participate in prospecting, geological exploration, design and scientific research work on oil and gas; control and analyze the process of field development; conduct field geological and geophysical studies, perform geological justification for field development, evaluate resources and reserves of minerals; study oil and gas reservoir rocks; determine the technology of drilling and mining operations.

Geophysical exploration technology includes:

- Study of geophysical fields of the earth;
- Mastering geophysical methods of well exploration, as well as geophysical methods of prospecting and exploration of mineral deposits using the following methods: electrical exploration, magnetic exploration, gravity exploration, seismic exploration;
- Study of modern high-precision geophysical equipment;
- Study of automated systems for processing and interpreting geophysical data;
- Internships in geological, geophysical and scientific organizations;
- The basics of geology are taught in the unique geological museum of USTU.

Future professions:

- Mining engineer geologist
- Mining Geophysicist
- Hydrogeologist
- Researcher at design and scientific institutes