

### 05.03.01 Geology

Degree: bachelor

Program length and study mode: 4 years, intramural

Language: Russian

Credits: 240

Start date: September 1, 2020

Location: Institute for Earth Sciences, Southern Federal University, Rostov-on-Don

#### Program overview:

The educational program provides training in two areas:

- Training of geologists engaged in search, exploration and extraction of mineral raw materials, precious metals and precious stones.
- Training of experts in Engineering Geology and Hydrogeology, who conduct engineering surveys for construction, search for groundwater, and prediction of dangerous geological processes.

#### Program structure:

It is based on a modular principle. The professional modules that meet the needs of two important sectors of the Russian economy are included:

– Mineral and extractive: geological survey, search and exploration of mineral resources; geology of oil and gas; hydrogeology includes search and exploration of groundwater for drinking and domestic water supply needs of the Russian Federation;

– Building: Engineering Geology is a cycle of disciplines that form the basis for engineering, geological and geotechnical surveys for design and construction of various buildings and structures.

Almost all graduation thesis topics are coordinated with the potential employers.

#### Typical units of study may include:

General Geology, Historical Geology and Paleontology, Crystallography and Mineralogy, Structural Geology, Geoinformation Systems and Technologies, Geotectonics, Petrography,

#### Careers:

- The Ministry of Natural Resources and Environment, Ministry for Emergency Situations; Ministry of Education and Science;
- the institutes of the Russian Academy of Sciences related to the study of geological processes, rocks and minerals;
- environmental authorities;
- geological departments, agencies and local authorities;
- government agencies;
- organizations, institutions and companies involved in exploitation of natural resources, extraction and transportation of mineral resources;
- design, survey, research, production, marketing, consulting, economic, legal, educational, expert departments, bureaus, centers, companies, institutions dealing with Geology, surveys, natural resources, hazardous engineering and geological processes, environmental protection;
- geotechnical, construction and industrial enterprises;
- public organizations and funds, representative offices of foreign companies.

Lithology, Regional Geology, Geomorphology and Quaternary Geology.

**Research areas:**

As part of the program, the following educational events are organized:

- Summer schools on the premises of "White river" training facilities on the following topics: field and laboratory methods of hydrogeological research; study of hazardous geological processes, their parameterization and prediction;
- Semester internships in foreign universities;
- Regional and Russian conferences on Engineering Geology, Hydrogeology, Mineralogy and Petrography.

**Get in touch:**

- *Fyodor V. Meshchaninov*

- *Candidate of Geological and Mineralogical Sciences*

- +7 (863)2184000 ext. 11473

- *fymeshaninov@sfedu.ru*

