

## ENGINEERING GEOLOGY

(name of the practice)

### annotation

#### TO THE INTERNSHIP PROGRAM OF A HIGHER EDUCATION INSTITUTION

Specialty I 70 02 01 - "Industrial and civil engineering"

	Form of higher education		
	Full-time (full-time)work	Part-time work	Part-time Correspondence (abbreviated)
Course	1	1	2
Semester	2	2	3
Lectures, hours	16	4	4
Laboratory classes, hours	16	4	4
Credit, semester	2	2	3
Classroom hours for the academic discipline	32	8	8
Independent work, hours	76	100	100
Total discipline hours / credits	108/3	108/3	108/3

1. Summary of the internship program. The purpose of the discipline is to study the laws of formation of the Earth's crust; the influence of exogenous and endogenous processes occurring in the Earth's crust; the study of ground bases found on the territory of the Republic of Belarus. The main task is to form a future specialist with up-to-date knowledge on: assessment of geological conditions and physical and mechanical properties of rocks in the construction area; assessment of technological and strength properties of sedimentary minerals; development of recommendations necessary for engineering preparation of the construction site and deposits, taking into account the requirements of environmental protection; justification of the most rational types and structures of structures, placement of objects of technological schemes and methods of production of works and materials with optimization of technical, economic and environmental requirements.

2. Learning outcomes. A student who has studied the discipline must:

**know:** government decisions in the field of capital construction in relation to the problems of engineering geology, the basic physical and mechanical properties of minerals and rocks that make it possible to improve the effectiveness of decisions made, the basics of hydrogeology, conditions of occurrence and mode of movement of underground water; methods for conducting engineering and geological surveys; methods for creating monitoring of the geological environment.

**be able to:** use the results of engineering and geological surveys, read maps and geological sections; be able to recognize the most common minerals and rocks used as natural building materials; know the most important geological processes that occur during the construction and operation of structures; optimally solve the main tasks of protecting the geological environment.

**possess:** determination of the main and derived physical and mechanical characteristics of the soil of foundations; conducting engineering and geological surveys and observations and skills in compiling a report on completed field and office work; skills in reading and constructing engineering and geological sections; ability to read and construct maps of isogypses and horizontals; determination of reliable foundations that can take the load from buildings and structures. structures.

3. Emerging competencies.

EX-12 Evaluate the main events and stages in history to form a holistic view of the development of science and technology;

CK-5 Apply knowledge about the basics of economic activity of construction enterprises and the value of construction.

4. Current certification form Credit:

Evaluation	Credited	Not credited
Points	51-100	0-50

